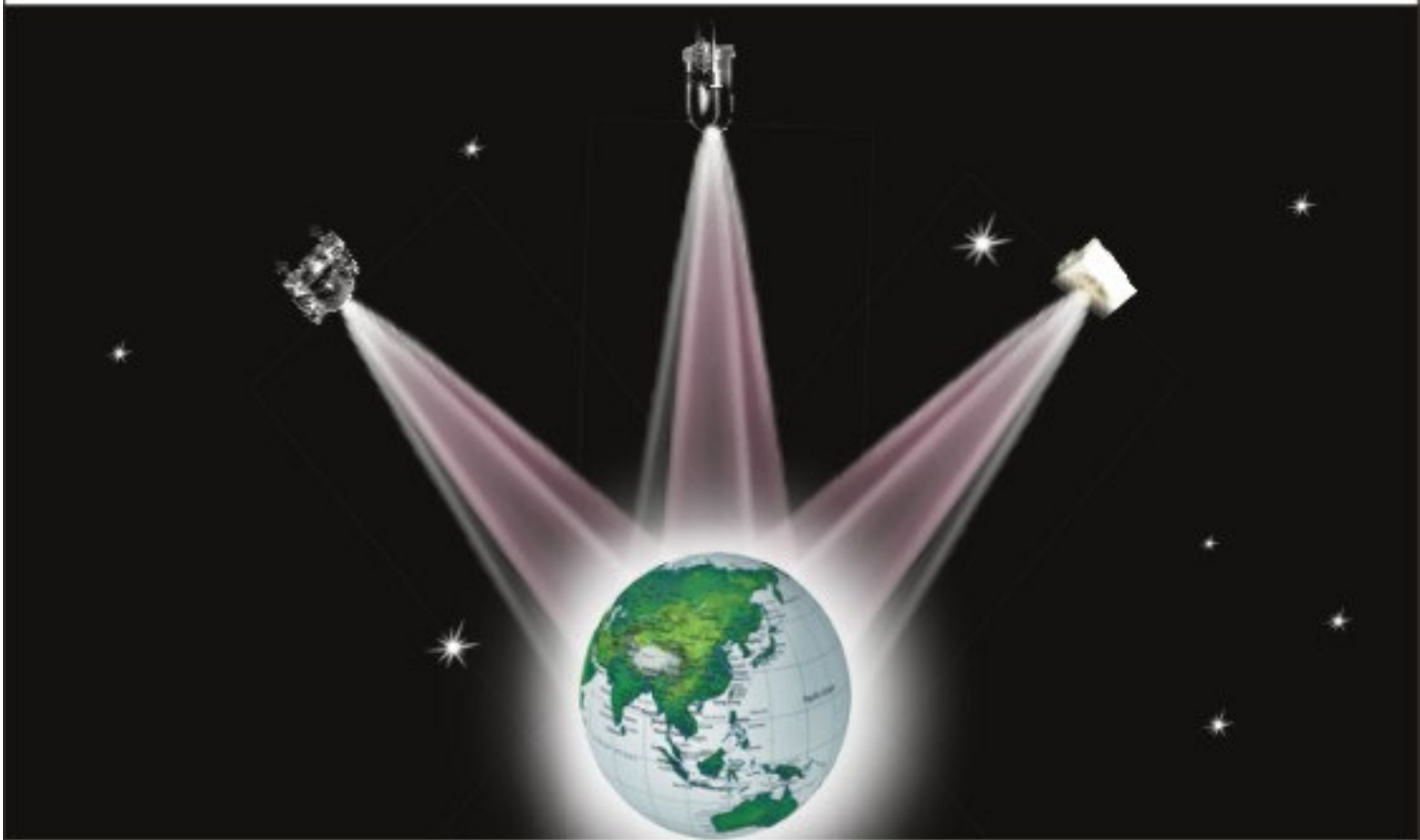


2008



LED

RoHS Compliant



**OPTOELECTRONICS
PRODUCTS**

About **OptoSupply**

We are a Hong Kong based LED manufacturer with our headquarter in Hong Kong and wholly owned factory located in Shenzhen of China. Owing the advance automatic machines and professional engineers. We strive to serve our worldwide customers with the full range of LED models at the most reasonable price vs. the highest brightness and the best quality and customer service.



OptoSupply Longgang R. & D. Office

Main Products:

Full range LED Lamps including Ultra-violet (UV) LED, White LED, Infrared (IR) Emitting Diode.

OEM (original equipment manufacturing) Product and

ODM (original design manufacturing) Product.



LED Lamp Production

Achievement:

- Founded in 2001 in Hong Kong
- All factories awarded ISO9001:2000 accreditation since 2003
- Expanded LED lamp production capacity to 2KK per day since 2004
- Moved factory to LongGang since November 2004
- Expanded manufacturing floor space to 5,000 square meter in 2004

Manufactory Technology

Through continuous research and development, **OptoSupply** pioneer applications for LEDs that create new value for our customers. The Group's dedicated R & D team is committed to developing innovative new applications for LED components. As **OptoSupply** engineers explore the immense untapped potential of LED technology, one of the Group's top priorities is to create new applications to make our customers' dreams become reality.

To achieve its goals, our R & D team focuses on three directions, namely materials, process and optics innovation. We strive to improve LED performance by deploying non-imaging optics technique, including ray tracing and LED light source optical modeling.

From deploying vertical integration to ensuring flexibility and speed, **OptoSupply** manufacturing facilities are engineered to meet the diverse needs of our customers and OEM partners worldwide.



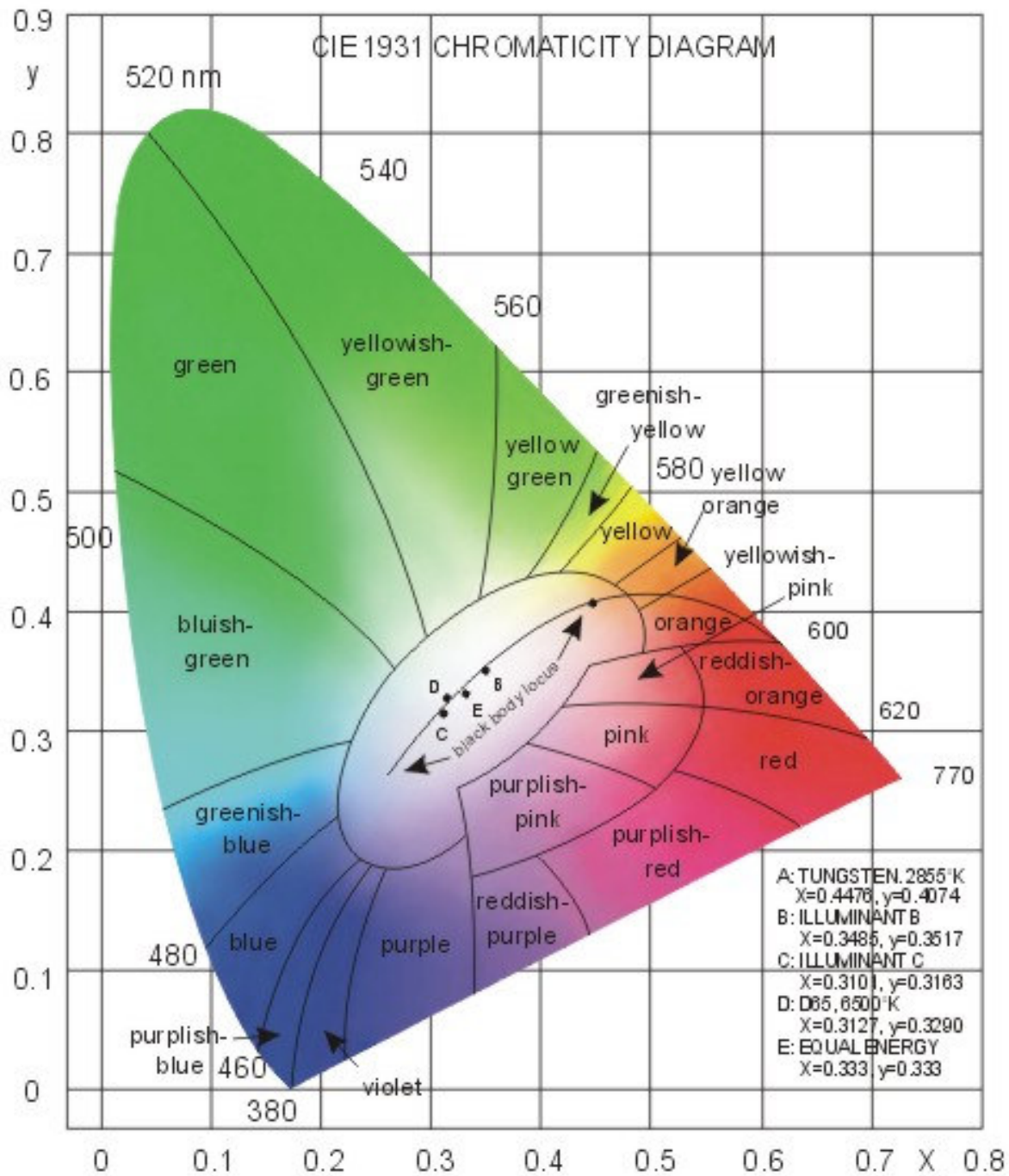
LED Lamp Assembly

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Chromaticity Diagram

***This data shows typical values.**



Examples of Applications

Full Color Display



Signal



Christmas Lighting



LED Toys



LED Backlight



LED Keychain



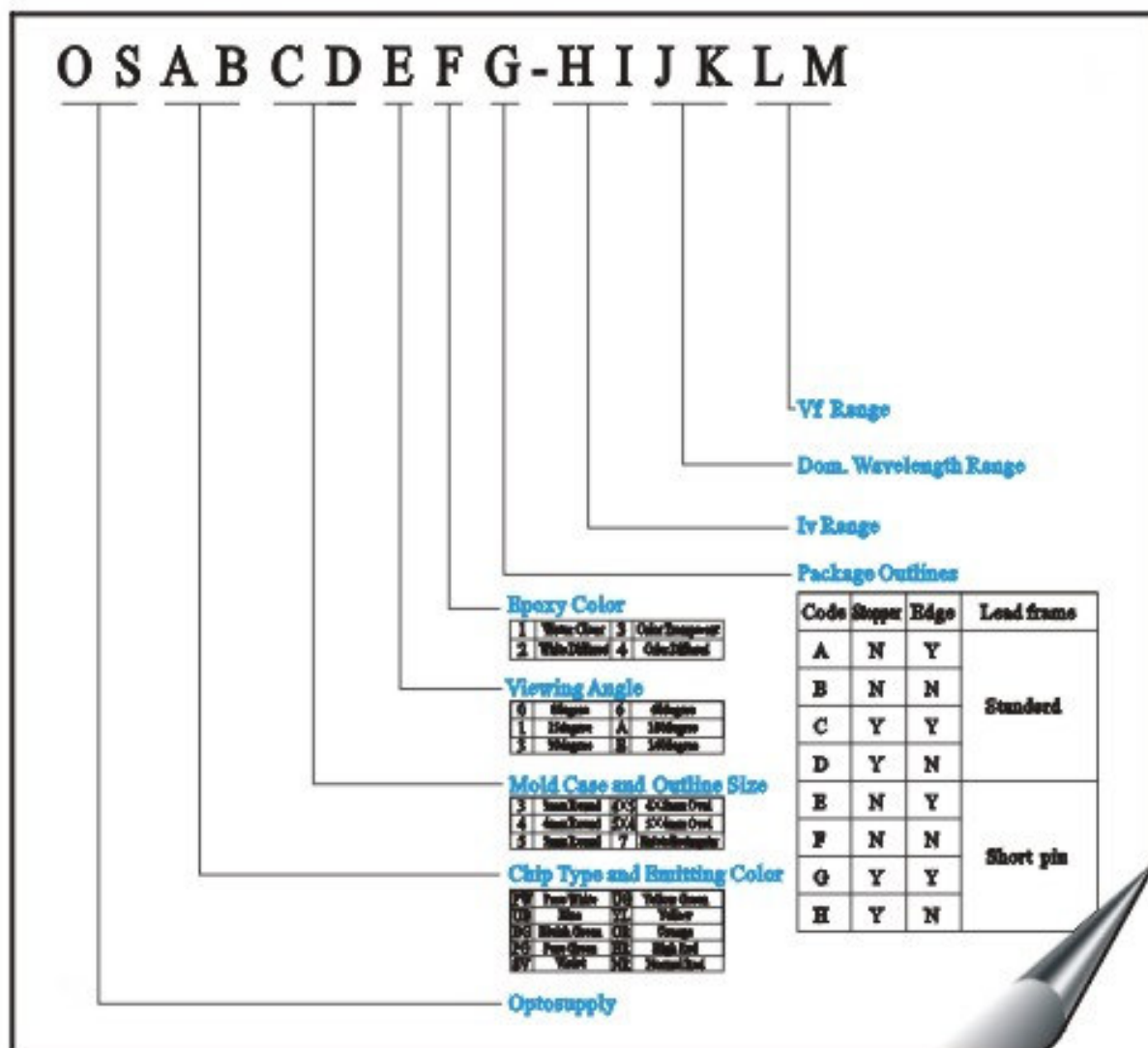
LED Light Bar



LED Decoration



Part Number Formation:



Intensity Standard

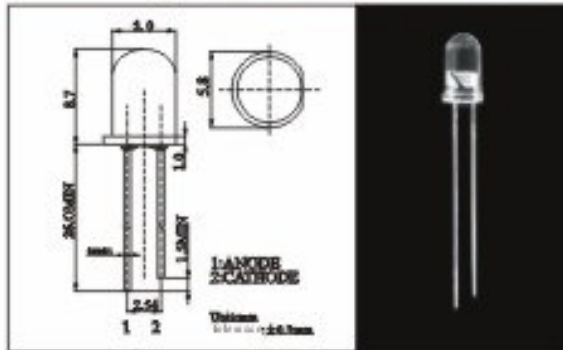
BIN	Range(mcd)	BIN	Range(mcd)
B	20-30	N	2180-3000
C	30-45	O	3000-4200
D	45-68	P	4200-5800
E	68-100	Q	5800-7000
F	100-150	R	7000-8400
G	150-220	S	8400-10000
H	220-330	T	10000-12000
I	330-500	U	12000-14400
J	500-750	V	14400-18000
K	750-1120	W	18000-22000
L	1120-1560	Y	22000-25000
M	1560-2180	Z	25000-30000

Forward Voltage

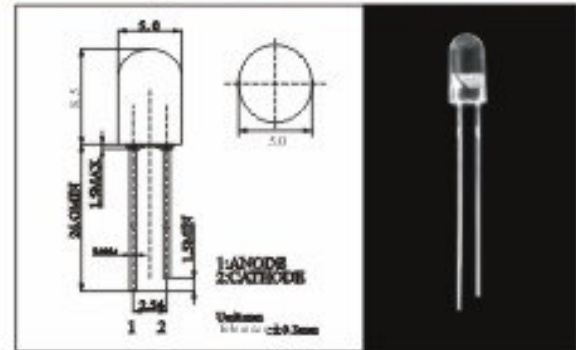
BIN	Range(V)	BIN	Range(V)
1	-1.6	A	3.2-3.4
2	1.6-1.8	B	3.4-3.6
3	1.8-2.0	C	3.6-3.8
4	2.0-2.2	D	3.8-4.0
5	2.2-2.4	E	4.0-4.2
6	2.4-2.6	F	4.2-4.4
7	2.6-2.8	G	4.4-4.6
8	2.8-3.0	H	4.6-4.8
9	3.0-3.2	I	4.8-5.0

Package Outlines

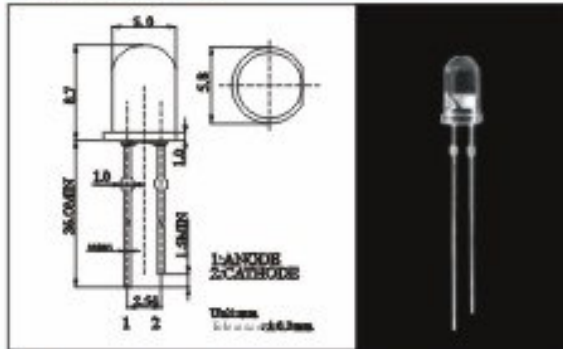
Φ5mm Type A



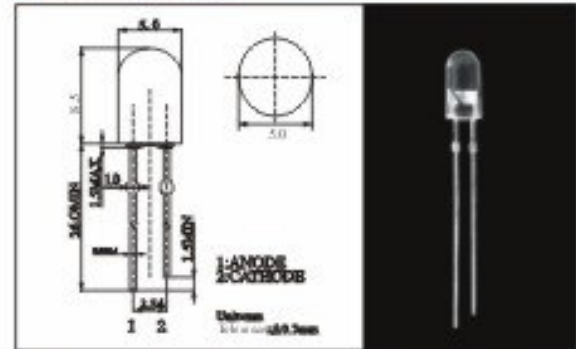
Φ5mm Type B



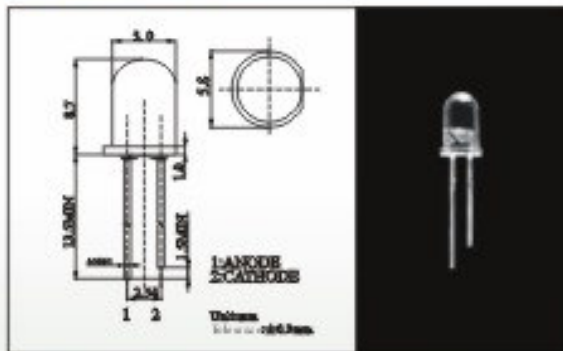
Φ5mm Type C



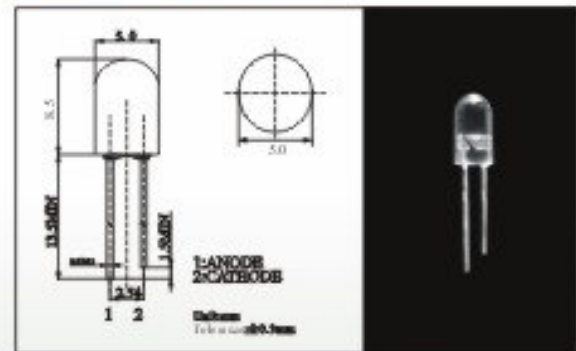
Φ5mm Type D



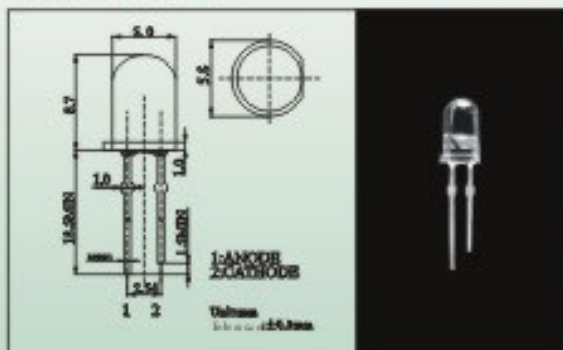
Φ5mm Type E



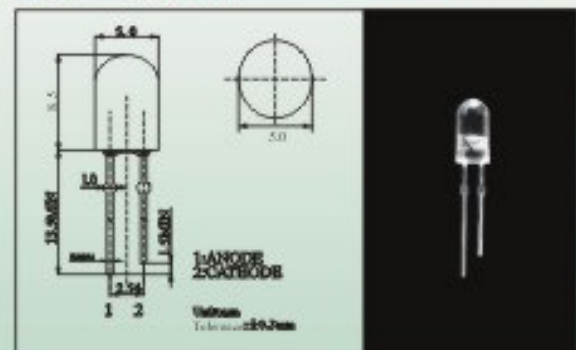
Φ5mm Type F



Φ5mm Type G

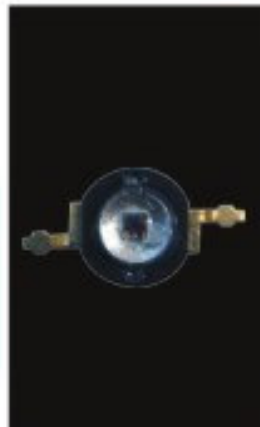


Φ5mm Type H



Xeon H Power Emitter Series

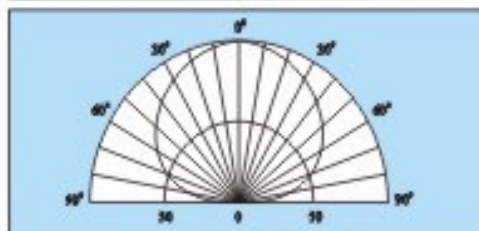
Round



Character

- Viewing angle 140 deg

Directive Characteristics (Ta=25°C)



Relative Luminous Intensity

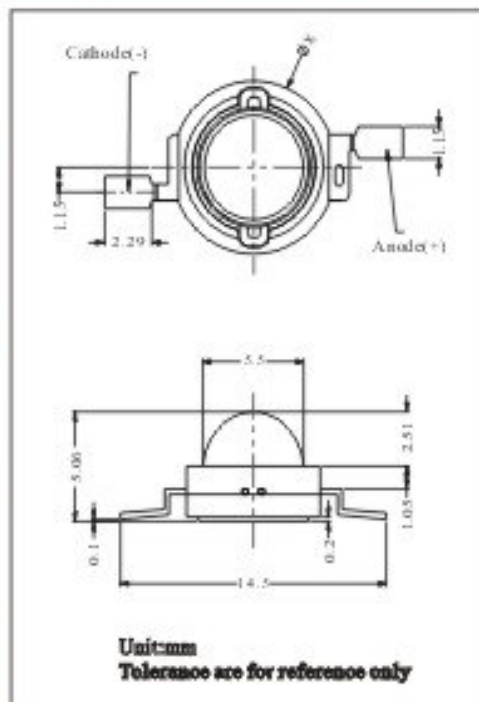
Absolute Maximum Ratings (Ta=25°C)

Item	Symbol	Value		Unit
		PG/UB/SV	R/O/Y	
DC Forward Current	IF	200	200	mA
Pulse Forward Current	IFP	250*1	250*1	mA
Reverse Voltage	VR	5	5	V
Power Dissipation	PD	300	600	mW
Operating Temperature	Topr	-30~+85	-30~+85	°C
Storage Temperature	Tstg	-40~+100	-40~+100	°C

*1 Duty 1/10 Pulse Width 10 ms

Package Outlines

(Unit:mm)



Electrical and Optical Characteristics

Part Number*2	Emitting Color	Lens Type	Forward Voltage VF (V)		Color Temperature CCT(K)*4		Luminous Intensity (lm)*3		Reverse Current IR (μA)		
			Working Current:IF=150mA								
			Typ.	Max.	Typ.	Max.	Typ.	Max.			
OSFWS1E1PH	Pure White	Water Clear	3.3	4.0	6500	10000	25	40	<10		
OSWCS1E1PH	Warm White	Water Clear	3.3	4.0	3000	4000	15	30	<10		

Electrical and Optical Characteristics

Part Number*2	Emitting Color	Lens Type	Forward Voltage VF (V)		Dominant Wavelength wd (nm)*3		Luminous Intensity (lm)*3		Reverse Current IR (μA)		
			Working Current:IF=150mA								
			Typ.	Max.	Typ.	Max.	Typ.	Max.			
OSUBS1E1PH	Blue	Water Clear	3.3	4.0	465	475	5	8	<10		
OSPOS1E1PH	Pure Green	Water Clear	3.3	4.0	525	535	25	40	<10		
OSBAS1E1PH	Amber	Water Clear	2.5	3.0	595	600	20	30	<10		
OSRS1E1PH	Red	Water Clear	2.5	3.0	625	635	20	30	<10		

*2 See table for Luminous Intensity Ranks

*3 Axial Direction (Luminous Intensity)

*4 Color Temperature Tolerance is ±500K

*5 Devices are sorted by 5nm wavelength ranges

Package

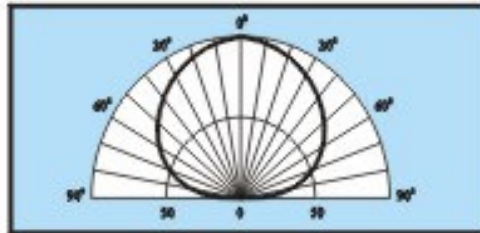
- Bulk..... 100pieces/bag (Code No.1)
- Bulk..... 200pieces/bag (Code No.2)
- Bulk..... 500pieces/bag (Code No.5)

Xeon 1 Power Emitter Series

Round


Characters

- Viewing angle 140 deg

Directive Characteristics (Ta=25°C)


Relative Luminous Intensity

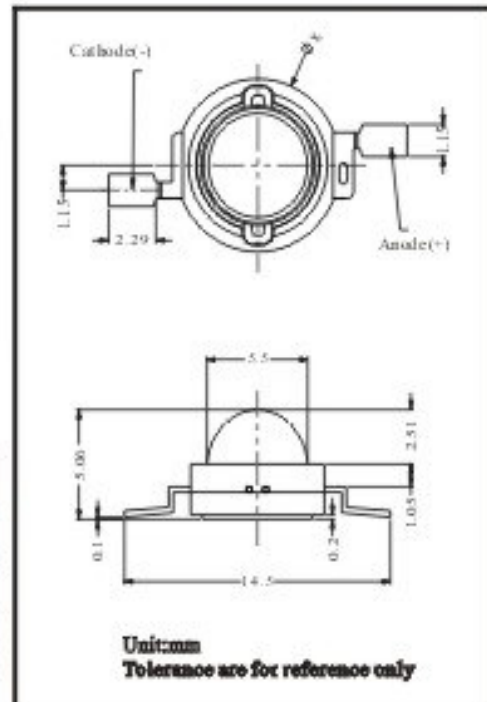
Absolute Maximum Ratings (Ta=25°C)

Item	Symbol	Value		Unit
		PG/UB/SV	R/O/Y	
DC Forward Current	I_F	400	400	mA
Pulse Forward Current	I_{FP}	500 ^{*1}	500 ^{*1}	mA
Reverse Voltage	V_R	5	5	V
Power Dissipation	P_D	1600	1200	mW
Operating Temperature	T_{op}	-30~+85	-30~+85	°C
Storage Temperature	T_{stg}	-40~+100	-40~+100	°C

*1 Duty 1/10 Pulse Width 10 ms

Package Outlines

(Unit:mm)


Electrical and Optical Characteristics

Part Number ^{*2}	Emitting Color	Lens Type	Forward Voltage VF (V)		Color Temperature CCT(K) ^{*4}		Luminous Intensity (lm) ^{*3}		Reverse Current IR (μA)		
			Working Current:IF=650mA								
			Typ.	Max.	Typ.	Max.	Typ.	Max.			
OSFWS1E1P1	Pure White	Water Clear	3.3	4.0	6500	10000	60	100	<10		
OSFWS1E1P1	Warm White	Water Clear	3.3	4.0	3000	4000	40	70	<10		

Electrical and Optical Characteristics

Part Number ^{*2}	Emitting Color	Lens Type	Forward Voltage VF(V)		Dominant Wavelength wd (nm) ^{*5}		Luminous Intensity (lm) ^{*3}		Reverse Current IR (μA)		
			Working Current:IF=650mA								
			Typ.	Max.	Typ.	Max.	Typ.	Max.			
OSUBS1E1P1	Blue	Water Clear	3.3	4.0	465	475	10	15	<10		
OSPGS1E1P1	Pure Green	Water Clear	3.3	4.0	525	535	60	100	<10		
OSBAS1E1P1	Amber	Water Clear	2.5	3.0	595	600	40	70	<10		
OSBS1E1P1	Red	Water Clear	2.5	3.0	625	635	40	70	<10		

*2 See table for Luminous Intensity Ranks

*3 Axial Direction (Luminous Intensity)

*4 Color Temperature Tolerance is ±500K

*5 Devices are sorted by 5nm wavelength ranges

Note: Do not drive at rated current more than 5 s without heatsink for Xeon 1 emitter series.

Package

- Bulk..... 100pieces/bag (Code No.1)
- Bulk..... 200pieces/bag (Code No.2)
- Bulk..... 500pieces/bag (Code No.5)

Xeon 3 Power Emitter Series

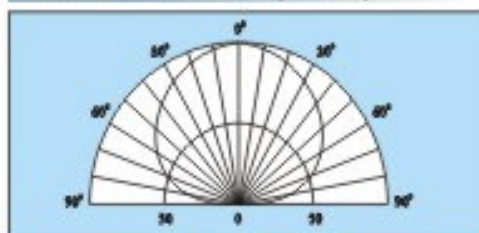
Round



Character

- Viewing angle 140 deg

Directive Characteristics (Ta=25°C)



Relative Luminous Intensity

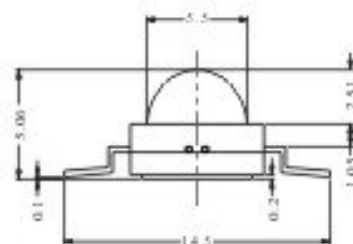
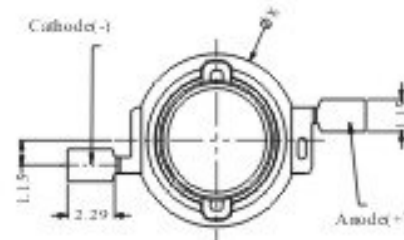
Absolute Maximum Ratings (Ta=25°C)

Item	Symbol	Value		Unit
		PG/UB/SV	R/O/Y	
DC Forward Current	IF	800	800	mA
Pulse Forward Current	IFP	1000*1	1000*1	mA
Reverse Voltage	VR	5	5	V
Power Dissipation	PD	3200	2400	mW
Operating Temperature	Topr	-30~+85	-30~+85	°C
Storage Temperature	Tstg	-40~+100	-40~+100	°C

*1 Duty 1/10 Pulse Width 10 ms

Package Outlines

(Unit:mm)



Unit:mm
Tolerance see for reference only

Electrical and Optical Characteristics

Part Number*2	Emitting Color	Lens Type	Forward Voltage VF (V)		Color Temperature CCT(K)*4		Luminous Intensity (lm)*3		Reverse Current IR (μA)		
			Working Current:IF=700mA								
			Typ.	Max.	Typ.	Max.	Typ.	Max.			
06PW51EIP3	Pure White	Water Clear	3.3	4.0	6500	10000	110	180	<10		
06WC51EIP3	Warm White	Water Clear	3.3	4.0	3000	4000	70	120	<10		

Electrical and Optical Characteristics

Part Number*2	Emitting Color	Lens Type	Forward Voltage VF(V)		Dominant Wavelength wd (nm)*3		Luminous Intensity (lm)*3		Reverse Current IR (μA)		
			Working Current:IF=700mA								
			Typ.	Max.	Typ.	Max.	Typ.	Max.			
06UB51EIP3	Blue	Water Clear	3.3	4.0	465	475	18	25	<10		
06PG51EIP3	Pure Green	Water Clear	3.3	4.0	525	535	110	180	<10		
06BA51EIP3	Amber	Water Clear	2.5	3.0	595	600	70	120	<10		
06BR51EIP3	Red	Water Clear	2.5	3.0	625	635	70	120	<10		

*2 See table for Luminous Intensity Ranks

*3 Axial Direction (Luminous Intensity)

*4 Color Temperature Tolerance is ±500K

*5 Devices are sorted by 5nm wavelength ranges

Note: Do not drive at rated current more than 5 s without heatsink for Xeon 3 emitter series.

Package

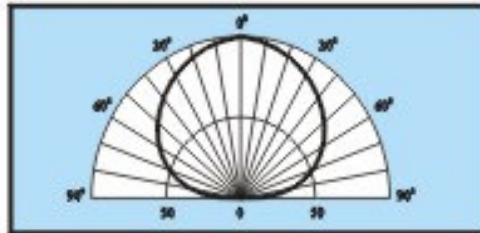
Bulk.....	100pieces/bag	(Code No.1)
Bulk.....	200pieces/bag	(Code No.2)
Bulk.....	500pieces/bag	(Code No.5)

Xeon 5 Power Emitter Series

Round

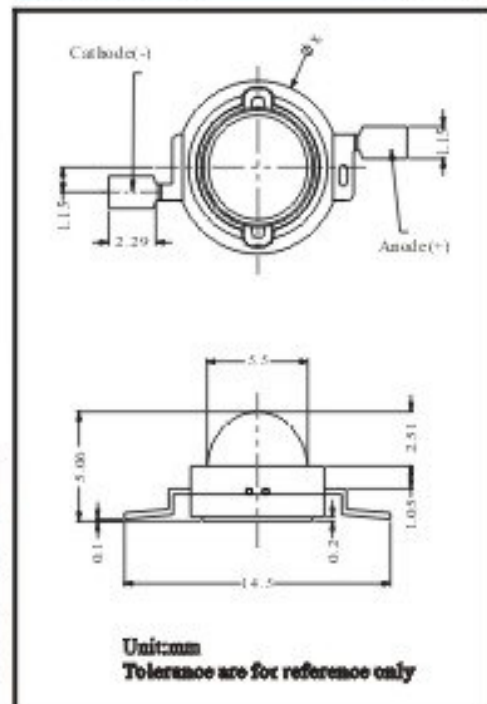
Characters

- Viewing angle 140 deg

Directive Characteristics (Ta=25°C)

Relative Luminous Intensity
Absolute Maximum Ratings (Ta=25°C)

Item	Symbol	Value		Unit
		PG/UB/SV	R/O/Y	
DC Forward Current	I_F	1500	1500	mA
Pulse Forward Current	I_{FP}	2000 ^{*1}	2000 ^{*1}	mA
Reverse Voltage	V_R	5	5	V
Power Dissipation	P_D	6000	4500	mW
Operating Temperature	T_{op}	-30~+85	-30~+85	°C
Storage Temperature	T_{stg}	-40~+100	-40~+100	°C

*1 Duty 1/10 Pulse Width 10 ms

Package Outlines
(Unit:mm)

Electrical and Optical Characteristics

Part Number ^{*2}	Emitting Color	Lens Type	Forward Voltage VF (V)		Color Temperature CCT(K) ^{*4}		Luminous Intensity (lm) ^{*3}		Reverse Current IR (μA)		
			Working Current:IF=1400mA								
			Typ.	Max.	Typ.	Max.	Typ.	Max.			
OSPW51E1P5	Pure White	Water Clear	3.3	4.0	6500	10000	200	320	<10		
OSWC51E1P5	Warm White	Water Clear	3.3	4.0	3000	4000	120	220	<10		

Electrical and Optical Characteristics

Part Number ^{*2}	Emitting Color	Lens Type	Forward Voltage VF(V)		Dominant Wavelength wd (nm) ^{*5}		Luminous Intensity (lm) ^{*3}		Reverse Current IR (μA)		
			Working Current:IF=1400mA								
			Typ.	Max.	Typ.	Max.	Typ.	Max.			
OSUB51E1P5	Blue	Water Clear	3.3	4.0	465	475	32	45	<10		
OSPG51E1P5	Pure Green	Water Clear	3.3	4.0	525	535	200	320	<10		
OSBA51E1P5	Amber	Water Clear	2.5	3.0	595	600	120	220	<10		
OSBR51E1P5	Red	Water Clear	2.5	3.0	625	635	120	220	<10		

*2 See table for Luminous Intensity Ranks

*3 Axial Direction (Luminous Intensity)

*4 Color Temperature Tolerance is ±500K

*5 Devices are sorted by 5nm wavelength ranges

Note: Do not drive at rated current more than 2s without heatsink for Xeon 5 emitter series.

Package

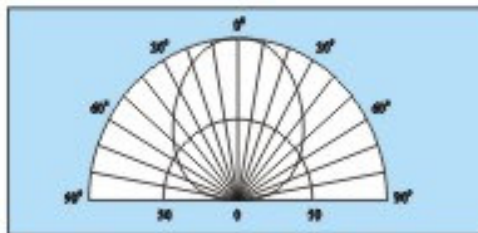
- Bulk..... 100pieces/bag (Code No.1)
- Bulk..... 200pieces/bag (Code No.2)
- Bulk..... 500pieces/bag (Code No.5)

Commercial Power Series



Characters

- Viewing angle L20 deg

 Directive Characteristics (T_a=25°C)


Relative Luminous Intensity

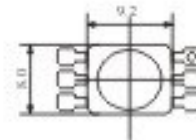
 Absolute Maximum Ratings (T_a=25°C)

Item	Symbol	Value		Unit
		PG/UB/SV	R/O/Y	
DC Forward Current	I _F	200	200	mA
Pulse Forward Current	I _{PF}	250*1	250*1	mA
Reverse Voltage	V _R	5	5	V
Power Dissipation	P _D	840	560	mW
Operating Temperature	T _{OP}	-30~+85	-30~+85	°C
Storage Temperature	T _{STG}	-40~+100	-40~+100	°C

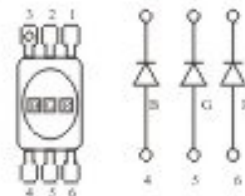
*1 Duty 1/10 Pulse Width 10 ms

Package Outlines

(Unit:mm)



RGB:

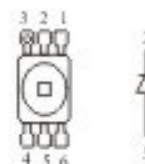


MONO-COLOR:

COLOR: R G B Y

CATHODE: 2 2 2 2

ANODE: 5 5 5 5



Electrical and Optical Characteristics

Part Number*2	Emitting Color	Lens Type	Forward Voltage V _F (V)		Dominant Wavelength λ _d (nm)*4/CCT(K)*5		Luminous Intensity I _v (mcd)*3		Reverse Current I _R (μA) at V _R =5V		
			Working Current: I _F =150mA								
			Typ.	Max.	Typ.	Max.	Typ.	Max.			
OSTA51B1P	Red	Water Clear	2.4	2.8	625	630	5800	7000	<10		
	Pure Green		3.6	4.2	525	535	7000	10000			
	Blue		3.6	4.2	470	475	4000	5300			
OSPW51B1P	White	Water Clear	3.6	4.2	6300	10000	14000	18000	<10		

Electrical and Optical Characteristics

Part Number*2	Emitting Color	Lens Type	Forward Voltage V _F (V)		Dominant Wavelength λ _d (nm)*4		Luminous Intensity I _v (mcd)*3		Reverse Current I _R (μA) at V _R =5V		
			Working Current: I _F =150mA								
			Typ.	Max.	Typ.	Max.	Typ.	Max.			
OSUB51B1P	Blue	Water Clear	3.6	4.2	470	475	5300	7000	<10		
OSPG51B1P	Pure Green	Water Clear	3.6	4.2	525	535	14400	18000	<10		
OSEY51B1P	Yellow	Water Clear	2.4	2.8	590	595	7000	10000	<10		
OSER51B1P	Red	Water Clear	2.4	2.8	625	630	7000	10000	<10		

- *2 See table for Luminous Intensity Ranks
- *3 Axial Direction (Luminous Intensity)
- *4 Devices are sorted by 5nm wavelength ranges
- *5 Color Temperature Tolerance is ±500k

Package

Bulk.....	100pieces/bag	(Code No.1)
Bulk.....	200pieces/bag	(Code No.2)
Bulk.....	500pieces/bag	(Code No.5)
Bulk.....	1000pieces/bag	(Code No.10)

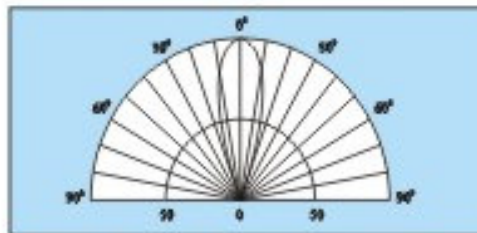
Premium Power Series



Characteristics

- Viewing angle 30 deg

Directive Characteristics (T_a=25°C)



Relative Luminous Intensity

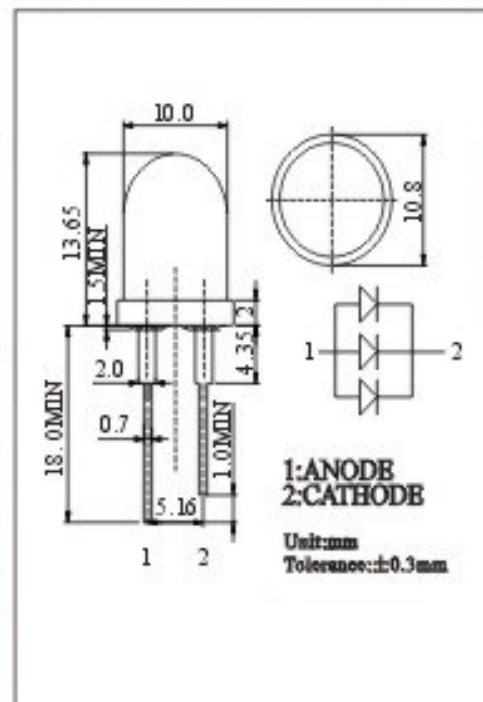
Absolute Maximum Ratings (T_a=25°C)

Item	Symbol	Value		Unit
		PG/UB/SV	R/O/Y	
DC Forward Current	I _F	100	150	mA
Pulse Forward Current	I _{FF}	200*1	250*1	mA
Reverse Voltage	V _R	5	5	V
Power Dissipation	P _D	400	360	mW
Operating Temperature	T _{opr}	-30~+85	-30~+85	°C
Storage Temperature	T _{stg}	-40~+100	-40~+100	°C

*1 Duty 1/10 Pulse Width 10 ms

Package Outlines

(Unit:mm)



Round

Electrical and Optical Characteristics

Part Number*2	Emitting Color	Lens Type	Forward Voltage V _F (V)		Chromaticity Coordinates*4				Luminous Intensity I _v (mcd)*3		Reverse Current I _R (μA) at V _R =5V
			Typ.	Max.	Min.	Max.	Min.	Max.	Typ.	Max.	
OSFW931U	White	Water Clear	3.3	3.8	0.22	0.32	0.24	0.34	16000	20000	<10

Electrical and Optical Characteristics

Part Number*2	Emitting Color	Lens Type	Forward Voltage V _F (V)		Dominant Wavelength λ _d (nm)*5		Luminous Intensity I _v (mcd)*3		Reverse Current I _R (μA) at V _R =5V
			Typ.	Max.	Typ.	Max.	Typ.	Max.	
OSUB931U	Blue	Water Clear	3.3	3.8	470	475	10000	15000	<10
OSPG931U	Pure Green	Water Clear	3.3	3.8	525	535	14400	18000	<10
OSBY931U	Yellow	Water Clear	2.0	2.4	590	595	10000	15000	<10
OSBO931U	Orange	Water Clear	2.0	2.4	605	610	10000	15000	<10
OSBR931U	Red	Water Clear	2.0	2.4	625	630	10000	15000	<10
OSMY931U	Yellow	Water Clear	2.0	2.4	590	595	15000	20000	<10
OSMO931U	Orange	Water Clear	2.0	2.4	605	610	15000	20000	<10
OSMR931U	Red	Water Clear	2.0	2.4	625	630	15000	20000	<10

*2 See table for Luminous Intensity Ranks

*3 Axial Direction (Luminous Intensity)

*4 Please refer to CIE 1931 chromaticity diagram

*5 Devices are sorted by 5nm wavelength ranges

Package

Bulk.....	100pieces/bag	(Code No.1)
Bulk.....	200pieces/bag	(Code No.2)
Bulk.....	500pieces/bag	(Code No.5)
Bulk.....	1000pieces/bag	(Code No.10)

Deluxe Power LED

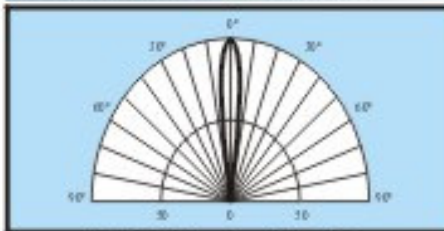
Round



Characters

- Viewing angle 15 deg

Directive Characteristics (Ta=25°C)



Relative Luminous Intensity

Absolute Maximum Ratings (Ta=25°C)

Item	Symbol	Value		Unit
		PG/UB/SV	R/O/Y	
DC Forward Current	IF	50	50	mA
Pulse Forward Current	IFP	250*1	250*1	mA
Reverse Voltage	VR	5	5	V
Power Dissipation	PD	200	140	mW
Operating Temperature	Topr	-30~+85	-30~+85	°C
Storage Temperature	Tstg	-40~+100	-40~+100	°C

*1 Duty 1/10 Pulse Width 10 ms

Electrical and Optical Characteristics

Part Number*2	Emitting Color	Lens Type	Forward Voltage VF (V)		Chromaticity Coordinates*4				Luminous Intensity Iv (mcd)*3		Reverse Current IR (μA) at Vr=5V
			Working Current: IF=30mA		x		y				
			Typ.	Max.	Min.	Max.	Min.	Max.	Typ.	Max.	
OSPW5111P	White	Water Clear	3.4	4.0	0.22	0.32	0.24	0.34	18000	24000	<10

Electrical and Optical Characteristics

Part Number*2	Emitting Color	Lens Type	Forward Voltage VF (V)		Dominant Wavelength λd (nm)*5		Luminous Intensity Iv (mcd)*3		Reverse Current IR (μA) at Vr=5V
			Working Current: IF=30mA						
			Typ.	Max.	Typ.	Max.	Typ.	Max.	
OSUB5111P	Blue	Water Clear	3.4	4.0	470	475	10000	15000	<10
OSPG5111P	Pure Green	Water Clear	3.4	4.0	525	535	25000	40000	<10
OSER5111P	Red	Water Clear	2.2	2.6	625	630	15000	22000	<10
OSBO5111P	Orange	Water Clear	2.2	2.6	605	610	15000	22000	<10
OSEY5111P	Yellow	Water Clear	2.2	2.6	590	595	15000	22000	<10
OSMR5111P	Red	Water Clear	2.2	2.6	625	630	20000	27000	<10
OSMO5111P	Orange	Water Clear	2.2	2.6	605	610	20000	27000	<10
OSMY5111P	Yellow	Water Clear	2.2	2.6	590	595	20000	27000	<10

*2 See table for Luminous Intensity Ranks

*3 Axial Direction (Luminous Intensity)

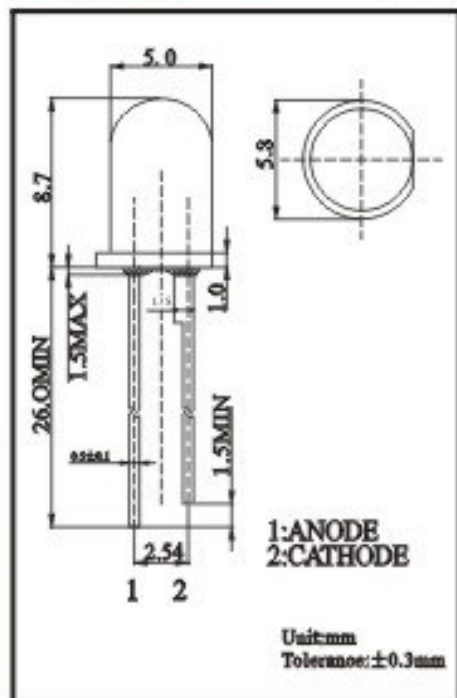
*4 Please refer to CIE 1931 chromaticity diagram

*5 Devices are sorted by 5nm wavelength ranges

Package

- Bulk..... 100pieces/bag (Code No.1)
- Bulk..... 200pieces/bag (Code No.2)
- Bulk..... 500pieces/bag (Code No.5)
- Bulk..... 1000pieces/bag (Code No.10)

Package Outlines (Unit:mm)



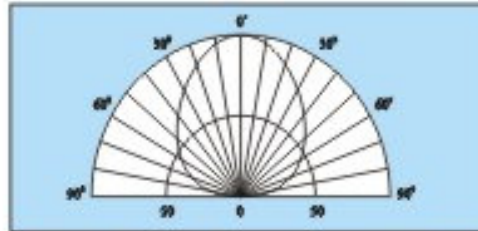
Top View SMD Mono-Color Series



Characters

- Viewing angle 120 deg
- Chip LED (3.5*2.8*1.9)

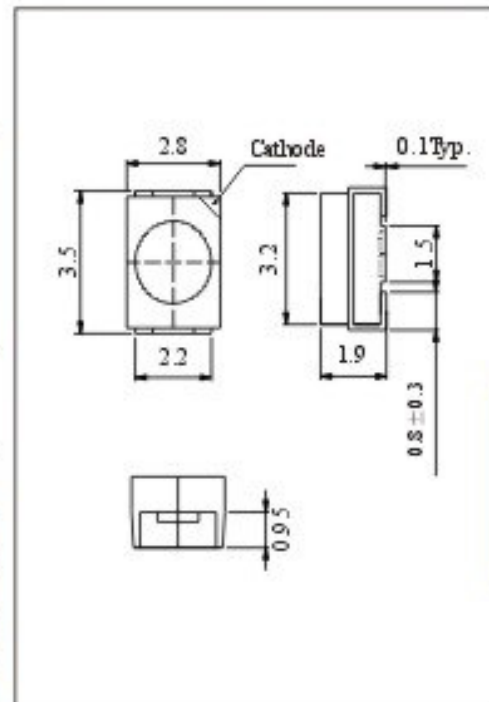
Directive Characteristics (Ta=25°C)



Relative Luminous Intensity

Package Outlines

(Unit:mm)



Absolute Maximum Ratings (Ta=25°C)

Item	Symbol	Value		Unit
		PG/UB/SV	HR/OE/YL	
DC Forward Current	I_F	30	50	mA
Pulse Forward Current	I_{FF}	100*1	120*1	mA
Reverse Voltage	V_R	5	5	V
Power Dissipation	P_D	120	120	mW
Operating Temperature	T_{opr}	-30~+85	-30~+85	°C
Storage Temperature	T_{stg}	-40~+100	-40~+100	°C

*1 Duty 1/10 Pulse Width 10 ms

Electrical and Optical Characteristics

Part Number*2	Emitting Color	Lens Type	Forward Voltage V_F (V)		Chromaticity Coordinates*4				Luminous Intensity I_v (mcd)*3		Reverse Current I_R (μA) at $V_R=5V$
			Working Current: $I_F=20mA$		x		y				
			Typ.	Max.	Min.	Max.	Min.	Max.	Typ.	Max.	
OSPWS1B1S	White	Water Clear	3.3	3.8	0.22	0.32	0.24	0.34	350	550	<10

Electrical and Optical Characteristics

Part Number*2	Emitting Color	Lens Type	Forward Voltage V_F (V)		Dominant Wavelength λ_d (nm)*2		Luminous Intensity I_v (mcd)*3		Reverse Current I_R (μA) at $V_R=5V$
			Working Current: $I_F=20mA$						
			Typ.	Max.	Typ.	Max.	Typ.	Max.	
OSUBS1B1S	Blue	Water Clear	3.3	3.8	470	475	100	150	<10
OSPGS1B1S	Pure Green	Water Clear	3.3	3.8	525	535	200	330	<10
OSBGS1B1S	Bluish Green	Water Clear	3.3	3.8	505	510	200	330	<10
OSYLS1B1S	Yellow	Water Clear	2.0	2.4	590	595	150	220	<10
OSORS1B1S	Orange	Water Clear	2.0	2.4	605	610	150	220	<10
OSRS1B1S	Red	Water Clear	2.0	2.4	625	630	150	220	<10

*2 See table for Luminous Intensity Ranks

*3 Axial Direction (Luminous Intensity)

*4 Please refer to CIE 1931 chromaticity diagram

*5 Devices are sorted by 5nm wavelength ranges

Package

Bulk.....	100pieces/bag	(Code No.1)
Bulk.....	200pieces/bag	(Code No.2)
Bulk.....	500pieces/bag	(Code No.5)
Bulk.....	1000pieces/bag	(Code No.10)

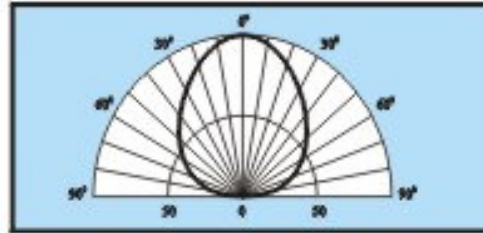
Top View SMD Bi-Color Series



Characters

- Viewing angle 120 deg
- Chip LED (3.5*2.8*1.9)

Directive Characteristics (Ta=25°C)



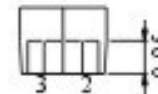
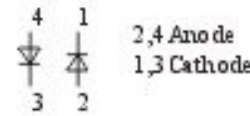
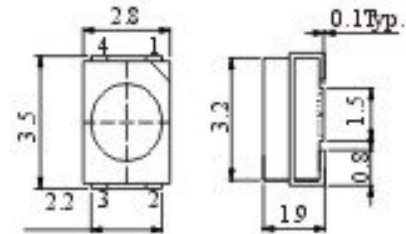
Relative Luminous Intensity

Absolute Maximum Ratings (Ta=25°C)

Item	Symbol	Value		Unit
		FG/UB/SV	HR/OR/YL	
DC Forward Current	I_F	30	50	mA
Pulse Forward Current	I_{PF}	100 ^{*1}	120 ^{*1}	mA
Reverse Voltage	V_R	5	5	V
Power Dissipation	P_D	120	120	mW
Operating Temperature	T_{op}	-30~+85	-30~+85	°C
Storage Temperature	T_{stg}	-40~+100	-40~+100	°C

*1 Pulse width Max. 10ms Duty ratio max 1/10

Package Outlines (Unit:mm)



Electrical and Optical Characteristics

Part Number ^{*2}	Emitting Color	Lens Type	Forward Voltage VF(V)		Dominant Wavelength λ_d (nm) ^{*4}		Luminous Intensity I_v (mcd) ^{*3}		Reverse Current IR (μ A) at Vr=5V
			Working Current:IF=20mA						
			Typ.	Max.	Typ.	Max.	Typ.	Max.	
O6RG51B1S	Red	Water Clear	2.0	2.4	625	630	150	220	<10
	Yellow Green		2.0	2.4	570	575	120	180	
O6RB51B1S	Red	Water Clear	2.0	2.4	625	630	150	220	<10
	Blue		3.3	3.8	470	475	100	150	
O6RP51B1S	Red	Water Clear	2.0	2.4	625	630	150	220	<10
	Pure Green		3.3	3.8	525	535	200	330	
O6YG51B1S	Yellow	Water Clear	2.0	2.4	590	595	150	220	<10
	Yellow Green		2.0	2.4	570	575	120	180	
O6YB51B1S	Yellow	Water Clear	2.0	2.4	590	595	150	220	<10
	Blue		3.3	3.8	470	475	100	150	
O6BP51B1S	Blue	Water Clear	3.3	3.8	470	475	100	150	<10
	Pure Green		3.3	3.8	525	535	200	330	

*2 See table for Luminous Intensity Ranks

*3 Axial Direction (Luminous Intensity)

*4 Devices are sorted by 5nm wavelength ranges

Package

Bulk.....	100pieces/bag	(Code No.1)
Bulk.....	200pieces/bag	(Code No.2)
Bulk.....	500pieces/bag	(Code No.5)
Bulk.....	1000pieces/bag	(Code No.10)

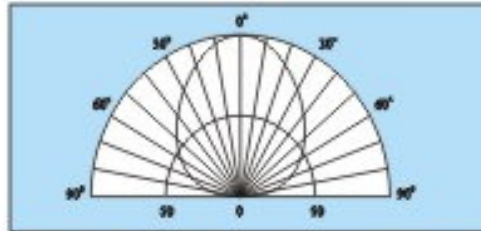
Top View SMD Full Color Series



Character

- Viewing angle 120 deg
- Chip LED (3.5*2.8*1.9)

Directive Characteristics (T_a=25°C)



Relative Luminous Intensity

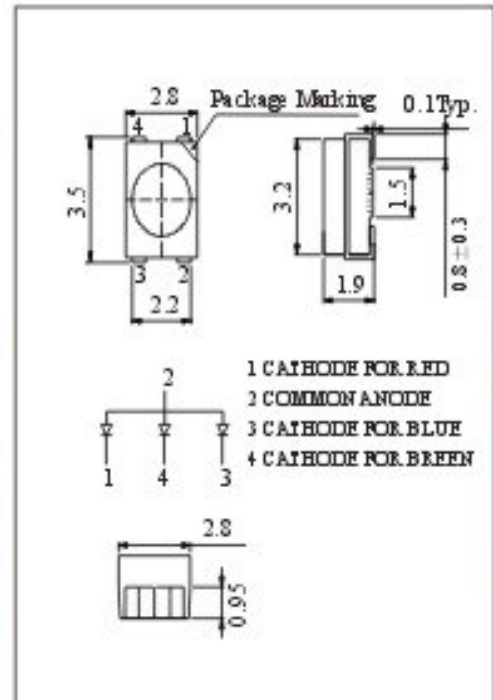
Absolute Maximum Ratings (T_a=25°C)

Item	Symbol	Value		Unit
		PG/UB/BV	HR/OR/YL	
DC Forward Current	I _F	30	50	mA
Pulse Forward Current	I _{FF}	100*1	120*1	mA
Reverse Voltage	V _R	5	5	V
Power Dissipation	P _D	120	120	mW
Operating Temperature	T _{opr}	-30~+85	-30~+85	°C
Storage Temperature	T _{stg}	-40~+100	-40~+100	°C

*1 Pulse width Max.10ms Duty ratio max 1/10

Package Outlines

(Unit:mm)



SMD

Electrical and Optical Characteristics

Part Number*2	Emitting Color	Lens Type	Forward Voltage V _F (V)		Dominant Wavelength λ _d (nm)*4		Luminous Intensity I _v (mcd)*3		Reverse Current I _R (μA) at V _R =5V		
			Working Current: I _F =20mA								
			Typ.	Max.	Typ.	Max.	Typ.	Max.			
OSTA51B1S	Red	Water Clear	2.0	2.4	625	630	150	220	<10		
	Pure Green		3.3	3.8	525	535	200	330			
	Blue		3.3	3.8	470	475	100	150			
OSTA51B2S	Red	White Diffused	2.0	2.4	625	630	75	110	<10		
	Pure Green		3.3	3.8	525	535	125	180			
	Blue		3.3	3.8	470	475	60	90			

*2 See table for Luminous Intensity Ranks

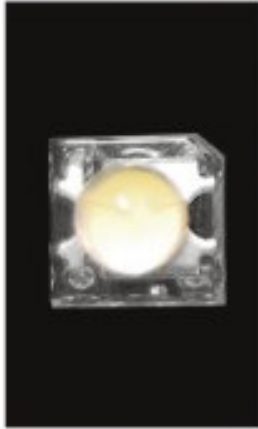
*3 Axial Direction (Luminous Intensity)

*4 Devices are sorted by 5nm wavelength ranges

Package

Bulk.....	100pieces/bag	(Code No.1)
Bulk.....	200pieces/bag	(Code No.2)
Bulk.....	500pieces/bag	(Code No.5)
Bulk.....	1000pieces/bag	(Code No.10)

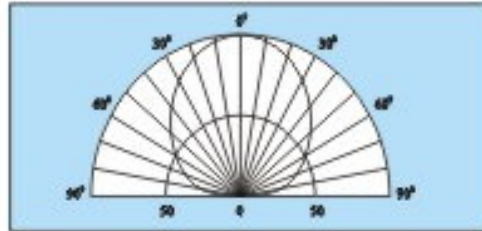
3 in 1 Series Super Flux LED OS3X71B1P



Characters

- Viewing angle 120deg

Directive Characteristics (T_a=25°C)



Relative Luminous Intensity

Absolute Maximum Ratings (T_a=25°C)

Item	Symbol	Value		Unit
		PG/UB/SV	HR/OR/YL	
DC Forward Current	I _F	30	50	mA
Pulse Forward Current	I _{FP}	100*1	120*1	mA
Power Dissipation	P _D	360	360	mW
Operating Temperature	T _{opr}	-30~+85	-30~+85	°C
Storage Temperature	T _{stg}	-40~+100	-40~+100	°C

- *1 Pulse width Max. 10ms Duty ratio max 1/10

Electrical and Optical Characteristics

Part Number*2	Emitting Color	Lens Type	Forward Voltage V _F (V)		Chromaticity Coordinates*4				Luminous Intensity I _v (mcd)*3		Reverse Current I _R (μA) at V _R =5V
			Typ.	Max.	x		y		Typ.	Max.	
					Min.	Max.	Min.	Max.			
Working Current: I _F =20mA											
OS3W71B1P	White	Water Clear	10	12	0.30	0.32	0.33	0.36	3800	6000	<10
OS3P71B1P	Pink	Water Clear	10	12	0.35	0.45	0.15	0.25	2000	3500	<10

Electrical and Optical Characteristics

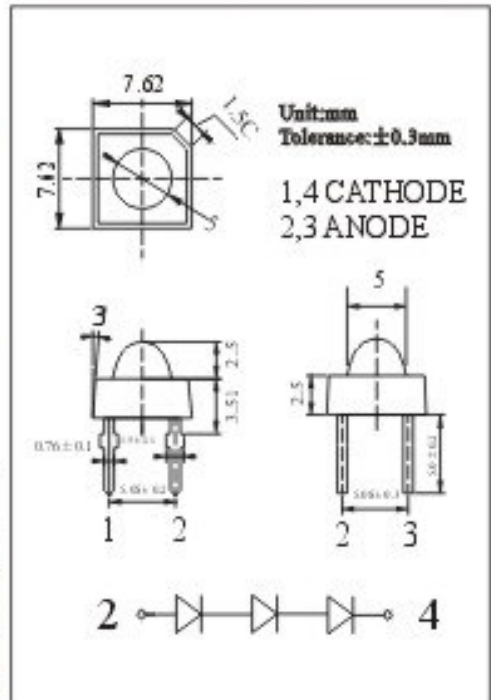
Part Number*2	Emitting Color	Lens Type	Forward Voltage V _F (V)		Dominant Wavelength λ _d (nm)*5		Luminous Intensity I _v (mcd)*3		Reverse Current I _R (μA) at V _R =5V
			Typ.	Max.	Typ.	Max.	Typ.	Max.	
OS3R71B1P	High Red	Water Clear	6.0	7.2	625	690	2800	4200	<10
OS3Y71B1P	Yellow	Water Clear	6.0	7.2	590	595	2800	4200	<10
OS3G71B1P	Pure Green	Water Clear	10	12	525	535	4000	6500	<10
OS3B71B1P	Blue	Water Clear	10	12	470	475	1850	3000	<10

- *2 See table for Luminous Intensity Ranks
- *3 Axial Direction (Luminous Intensity)
- *4 Please refer to CIE 1931 chromaticity diagram
- *5 Devices are sorted by 5nm wavelength ranges

Package

- Bulk..... 100pieces/bag (Code No.1)
- Bulk..... 200pieces/bag (Code No.2)
- Bulk..... 500pieces/bag (Code No.5)
- Bulk..... 1000pieces/bag (Code No.10)

Package Outline (Unit:mm)



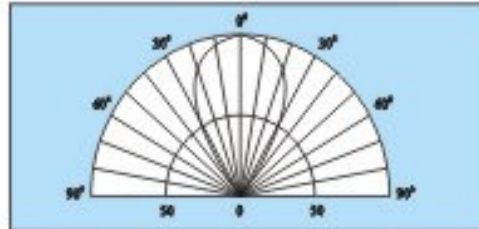
High Power Super Flux Series OSXX7161G



Characters

- Viewing angle 60deg

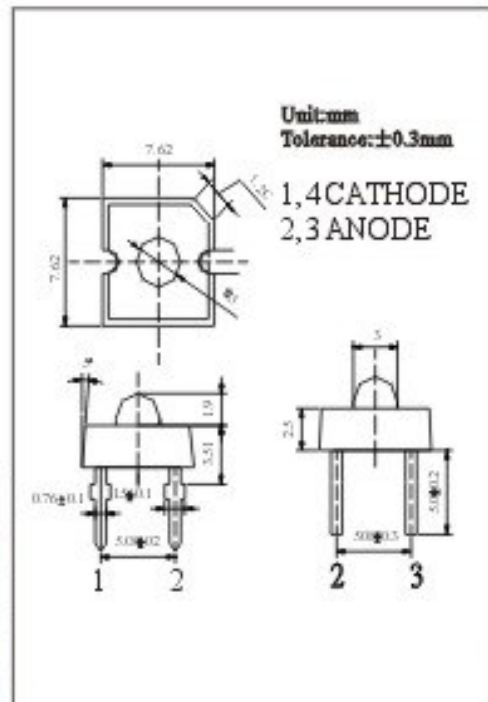
Directive Characteristics (Ta=25°C)



Relative Luminous Intensity

Package Outlines

(Unit:mm)



Absolute Maximum Ratings (Ta=25°C)

Item	Symbol	Value		Unit
		PG/UB/SV	HR/OR/YL	
DC Forward Current	IF	120	120	mA
Pulse Forward Current	IFP	200 ^{*1}	200 ^{*1}	mA
Power Dissipation	PD	480	360	mW
Operating Temperature	T _{opr}	-30~+85	-30~+85	°C
Storage Temperature	T _{stg}	-40~+100	-40~+100	°C

*1 Pulse width Max. 10ms Duty ratio max 1/10

Electrical and Optical Characteristics

Part Number ^{*2}	Emitting Color	Lens Type	Forward Voltage VF (V)		Chromaticity Coordinates ^{*4}				Luminous Intensity Iv (mcd) ^{*3}		Reverse Current IR (μA) at Vr=5V
			Typ.	Max.	x		y		Typ.	Max.	
					Min.	Max.	Min.	Max.			
Working Current:IF=100mA											
OSPW7161G	White	Water Clear	3.1	3.6	0.24	0.27	0.26	0.29	7500	9000	<10
OSPK7161G	Pink	Water Clear	3.1	3.6	0.35	0.45	0.15	0.23	1800	2200	<10

Electrical and Optical Characteristics

Part Number ^{*2}	Emitting Color	Lens Type	Forward Voltage VF(V)		Dominant Wavelength λd (nm) ^{*5}		Luminous Intensity Iv (mcd) ^{*3}		Reverse Current IR (μA) at Vr=5V
			Typ.	Max.	Typ.	Max.	Typ.	Max.	
OSER7161G	High Red	Water Clear	2.0	2.4	625	630	5100	6100	<10
OSBY7161G	Yellow	Water Clear	2.2	2.6	590	595	7300	8200	<10
OSUB7161G	Blue	Water Clear	3.1	3.6	470	475	5000	6500	<10
OSPG7161G	Pure Green	Water Clear	3.1	3.6	525	535	8000	10000	<10

*2 See table for Luminous Intensity Ranks

*3 Axial Direction (Luminous Intensity)

*4 Please refer to CIE 1931 chromaticity diagram

*5 Devices are sorted by 5nm wavelength ranges

Package

Bulk.....	100pieces/bag	(Code No.1)
Bulk.....	200pieces/bag	(Code No.2)
Bulk.....	500pieces/bag	(Code No.5)
Bulk.....	1000pieces/bag	(Code No.10)

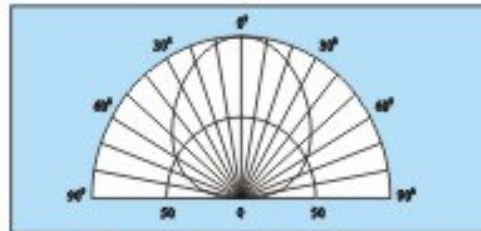
High Power Super Flux Series OSXX71B1P



Characters

- Viewing angle 120deg

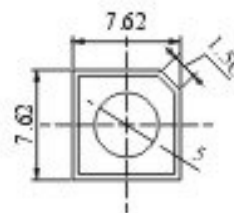
Directive Characteristics (Ta=25°C)



Relative Luminous Intensity

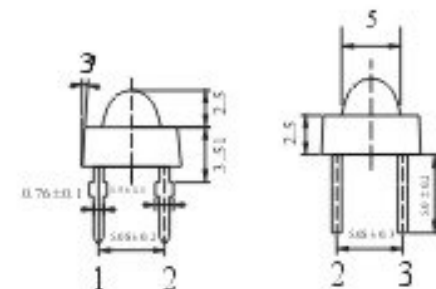
Package Outlines

(Unit:mm)



Unit:mm
Tolerance:±0.3mm

1,4 CATHODE
2,3 ANODE



Absolute Maximum Ratings (Ta=25°C)

Item	Symbol	Value		Unit
		PG/UB/SV	HR/OR/YL	
DC Forward Current	IF	100	100	mA
Pulse Forward Current	IFP	120*1	120*1	mA
Power Dissipation	PD	400	300	mW
Operating Temperature	T _{opr}	-30~+85	-30~+85	°C
Storage Temperature	T _{stg}	-40~+100	-40~+100	°C

- *1 Pulse width Max. 10ms Duty ratio max 1/10

Electrical and Optical Characteristics (Ta=25°C)

Part Number*2	Emitting Color	Lens Type	Forward Voltage VF (V)		Chromaticity Coordinates*4				Luminous Intensity Iv (mcd)*3		Reverse Current IR (μA)
			Typ.	Max.	x		y		Typ.	Max.	
					Min.	Max.	Min.	Max.			
Working Current:IF=70mA											
OSPW71B1P	White	Water Clear	3.3	3.8	0.24	0.27	0.26	0.29	5100	5700	<10
OSPK71B1P	Pink	Water Clear	3.3	3.8	0.35	0.43	0.15	0.25	1100	1350	<10

Electrical and Optical Characteristics (Ta=25°C)

Part Number*2	Emitting Color	Lens Type	Forward Voltage VF(V)		Dominant Wavelength λd (nm)*3		Luminous Intensity Iv (mcd)*3		Reverse Current IR (μA)
			Typ.	Max.	Typ.	Max.	Typ.	Max.	
OSER71B1P	High Red	Water Clear	2.2	2.6	625	630	2100	2350	<10
OSEY71B1P	Yellow	Water Clear	2.2	2.6	590	595	2200	2450	<10
OSPG71B1P	Pure Green	Water Clear	3.3	3.8	525	535	2600	2850	<10
OSUB71B1P	Blue	Water Clear	3.3	3.8	470	475	1350	1800	<10
OSBO71B1P	Orange	Water Clear	2.0	2.4	605	610	2000	2500	<10

- *2 See table for Luminous Intensity Ranks
- *3 Axial Direction (Luminous Intensity)
- *4 Please refer to CIE 1931 chromaticity diagram
- *5 Devices are sorted by 5nm wavelength ranges

Package

Bulk.....	100pieces/bag	(Code No.1)
Bulk.....	200pieces/bag	(Code No.2)
Bulk.....	500pieces/bag	(Code No.5)
Bulk.....	1000pieces/bag	(Code No.10)

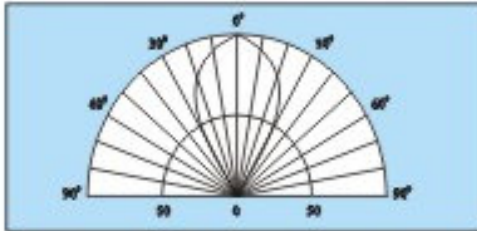
Super Flux Series



Characters

- Viewing angle 60 deg

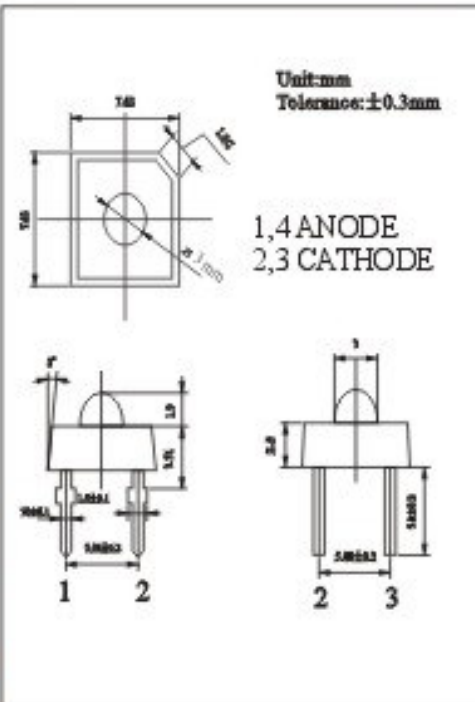
Directive Characteristics (T_a=25°C)



Relative Luminous Intensity

Package Outlines

(Unit:mm)



Unit:mm
Tolerance:±0.3mm

1,4 ANODE
2,3 CATHODE

Absolute Maximum Ratings (T_a=25°C)

Item	Symbol	Value		Unit
		PG/UB/SV	HR/OR/YL	
DC Forward Current	I _F	30	50	mA
Pulse Forward Current	I _{FP}	100*1	120*1	mA
Reverse Voltage	V _R	5	5	V
Power Dissipation	P _D	120	120	mW
Operating Temperature	T _{opr}	-30~+85	-30~+85	°C
Storage Temperature	T _{stg}	-40~+100	-40~+100	°C

*1 Pulse width Max.10ms Duty ratio max 1/10

Electrical and Optical Characteristics

Part Number*2	Emitting Color	Lens Type	Forward Voltage V _F (V)		Chromaticity Coordinates*4				Luminous Intensity I _v (mcd)*3		Reverse Current I _R (μA) at V _R =5V
			Working Current:I _F =20mA		x		y				
			Typ.	Max.	Min.	Max.	Min.	Max.	Typ.	Max.	
OSFW7161D	White	Water Clear	3.3	3.8	0.22	0.32	0.24	0.34	3500	5500	<10
OSPK7161D	Pink	Water Clear	3.3	3.5	0.35	0.45	0.15	0.25	1000	1500	<10

Electrical and Optical Characteristics

Part Number*2	Emitting Color	Lens Type	Forward Voltage V _F (V)		Dominant Wavelength λ _d (nm)*2		Luminous Intensity I _v (mcd)*3		Reverse Current I _R (μA) at V _R =5V
			Working Current:I _F =20mA						
			Typ.	Max.	Typ.	Max.	Typ.	Max.	
OSUB7161D	Blue	Water Clear	3.3	3.8	470	475	2000	3500	<10
OSPG7161D	Pure Green	Water Clear	3.3	3.8	525	535	5000	8000	<10
OSSV7161D	Violet	Water Clear	3.5	3.8	405	410	100	150	<10
OSYL7161D	Yellow	Water Clear	2.8	2.4	590	595	2500	3500	<10
OSOR7161D	Orange	Water Clear	2.8	2.4	605	610	2500	3500	<10
OSHR7161D	High Red	Water Clear	2.8	2.4	625	630	2500	3500	<10

*2 See table for Luminous Intensity Ranks

*3 Axial Direction (Luminous Intensity)

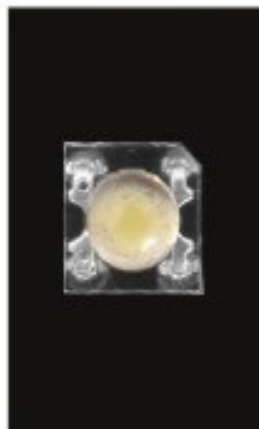
*4 Please refer to CIE 1931 chromaticity diagram

*5 Devices are sorted by 5nm wavelength ranges

Package

Bulk.....	100pieces/bag	(Code No.1)
Bulk.....	200pieces/bag	(Code No.2)
Bulk.....	500pieces/bag	(Code No.5)
Bulk.....	1000pieces/bag	(Code No.10)

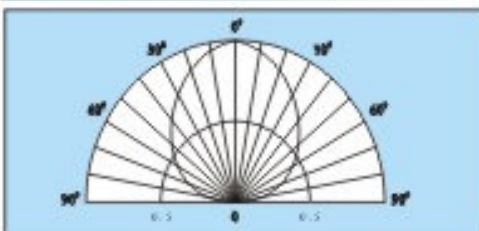
Super Flux Series



Character

- Viewing angle 120 deg

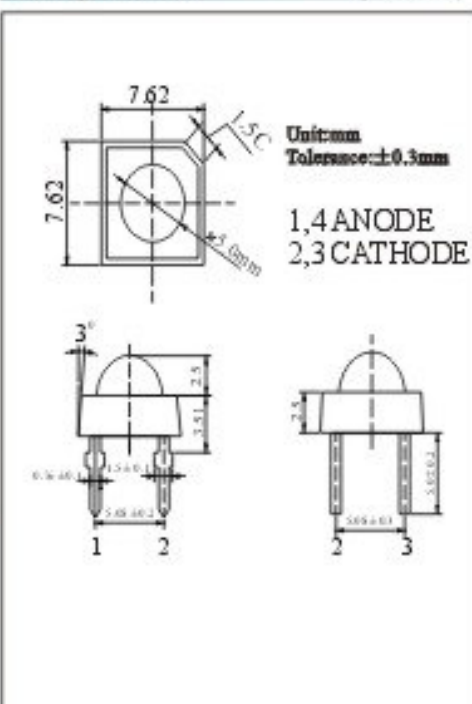
Directive Characteristics (Ta=25°C)



Relative Luminous Intensity

Package Outlines

(Unit:mm)



Absolute Maximum Ratings (Ta=25°C)

Item	Symbol	Value		Unit
		PG/UB/SV	HR/OR/YL	
DC Forward Current	IF	30	50	mA
Pulse Forward Current	IFP	100*1	120*1	mA
Reverse Voltage	VR	5	5	V
Power Dissipation	PD	120	120	mW
Operating Temperature	Tope	-30~+85	-30~+85	°C
Storage Temperature	Tsig	-40~+100	-40~+100	°C

*1 Pulse width Max.10ms Duty ratio max 1/10

Electrical and Optical Characteristics

Part Number*2	Emitting Color	Lens Type	Forward Voltage VF (V)		Chromaticity Coordinates*4				Luminous Intensity Iv (mcd)*5		Reverse Current IR (μA) at Vr=5V
			Working Current:IF=20mA		x		y				
			Typ.	Max.	Min.	Max.	Min.	Max.	Typ.	Max.	
OSPW71B1D	White	Water Clear	3.3	3.8	0.22	0.32	0.24	0.34	1500	2500	<10
OSPK71B1D	Pink	Water Clear	3.3	3.8	0.35	0.45	0.15	0.25	800	1200	<10

Electrical and Optical Characteristics

Part Number*2	Emitting Color	Lens Type	Forward Voltage VF(V)		Dominant Wavelength λd (nm)*5		Luminous Intensity Iv (mcd)*5		Reverse Current IR (μA) at Vr=5V
			Working Current:IF=20mA						
			Typ.	Max.	Typ.	Max.	Typ.	Max.	
OSUB71B1D	Blue	Water Clear	3.3	3.8	470	475	750	1120	<10
OPG71B1D	Pure Green	Water Clear	3.3	3.8	525	535	1560	3000	<10
OSV71B1D	Violet	Water Clear	3.5	3.8	405	410	60	100	<10
OYL71B1D	Yellow	Water Clear	2.0	2.4	590	595	1120	1560	<10
OR71B1D	Orange	Water Clear	2.0	2.4	605	610	1120	1560	<10
OR71B1D	High Red	Water Clear	2.0	2.4	625	630	1120	1560	<10

- *2 See table for Luminous Intensity Ranks
- *3 Axial Direction (Luminous Intensity)
- *4 Please refer to CIE 1931 chromaticity diagram
- *5 Devices are sorted by 5nm wavelength ranges

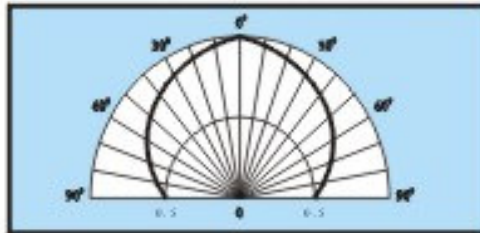
Package

- Bulk..... 100pieces/bag (Code No.1)
- Bulk..... 200pieces/bag (Code No.2)
- Bulk..... 500pieces/bag (Code No.5)
- Bulk..... 1000pieces/bag (Code No.10)

Super Flux Series


Characters

- Viewing angle 180 deg

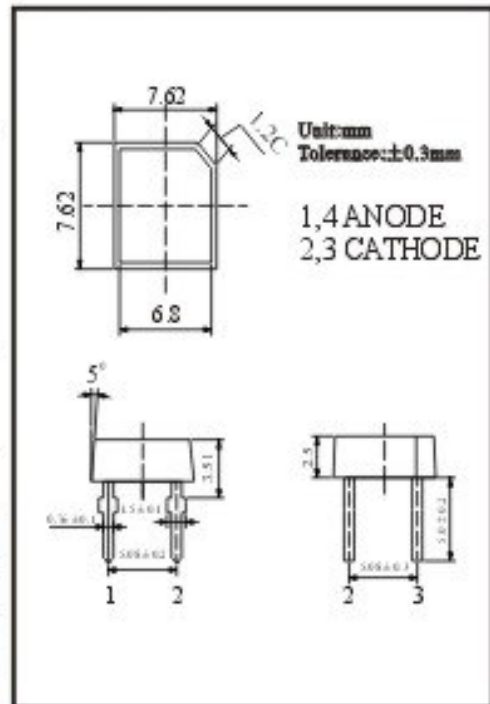
Directive Characteristics (Ta=25°C)

Relative Luminous Intensity
Absolute Maximum Ratings (Ta=25°C)

Item	Symbol	Value		Unit
		PG/UB/SV	HR/OR/YL	
DC Forward Current	I_F	30	50	mA
Pulse Forward Current	I_{FP}	100*1	120*1	mA
Reverse Voltage	V_R	5	5	V
Power Dissipation	P_D	120	120	mW
Operating Temperature	T_{opr}	-30~+85	-30~+85	°C
Storage Temperature	T_{sig}	-40~+100	-40~+100	°C

- *1 Pulse width Max. 10ms Duty ratio max 1/10

Package Outlines

(Unit:mm)


Electrical and Optical Characteristics

Part Number*2	Emitting Color	Lens Type	Forward Voltage VF (V)		Chromaticity Coordinates*4				Luminous Intensity Iv (mcd)*3		Reverse Current IR (μA) at Vr=5V
					x		y				
			Typ.	Max.	Min.	Max.	Min.	Max.	Typ.	Max.	
Working Current:IF=20mA											
06PW71KID	White	Water Clear	3.3	3.8	0.22	0.32	0.24	0.34	750	1120	<10
06PK71KID	Pink	Water Clear	3.3	3.8	0.35	0.45	0.15	0.25	220	400	<10

Electrical and Optical Characteristics

Part Number*2	Emitting Color	Lens Type	Forward Voltage VF(V)		Dominant Wavelength λd (nm)*5		Luminous Intensity Iv (mcd)*3		Reverse Current IR (μA) at Vr=5V
			Typ.	Max.	Typ.	Max.	Typ.	Max.	
Working Current:IF=20mA									
08UB71KID	Blue	Water Clear	3.3	3.8	470	475	330	500	<10
06PG71KID	Pure Green	Water Clear	3.3	3.8	525	535	1120	1560	<10
06SV71KID	Violet	Water Clear	3.5	3.8	405	410	30	60	<10
06YL71KID	Yellow	Water Clear	2.0	2.4	590	595	750	1120	<10
08OR71KID	Orange	Water Clear	2.0	2.4	605	610	750	1120	<10
08HR71KID	High Red	Water Clear	2.0	2.4	625	630	750	1120	<10

- *2 See table for Luminous Intensity Ranks
- *3 Axial Direction (Luminous Intensity)
- *4 Please refer to CIE 1931 chromaticity diagram
- *5 Devices are sorted by 5nm wavelength ranges

Package

- Bulk..... 100pieces/bag (Code No.1)
- Bulk..... 200pieces/bag (Code No.2)
- Bulk..... 500pieces/bag (Code No.5)
- Bulk..... 1000pieces/bag (Code No.10)

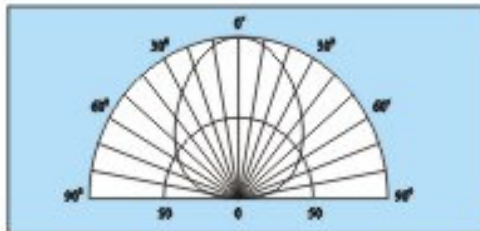
Full Color Super Flux Series



Characters

- Viewing angle 120deg

Directive Characteristics (Ta=25°C)



Relative Luminous Intensity

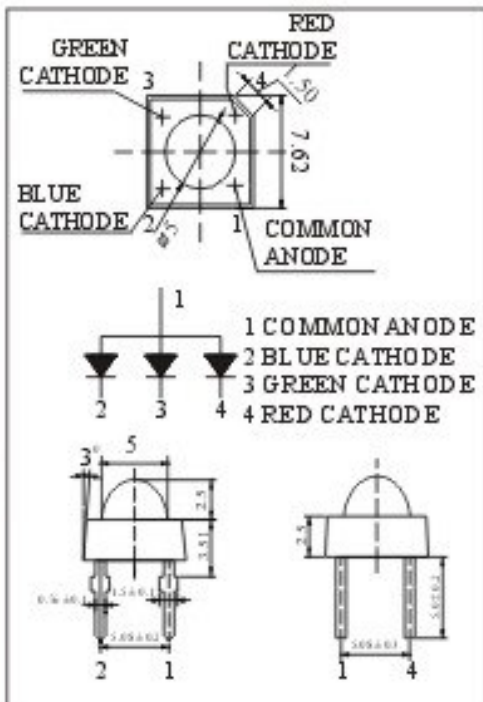
Absolute Maximum Ratings (Ta=25°C)

Item	Symbol	Value		Unit
		PG/UB/SV	HR/OR/YL	
DC Forward Current	IF	30	50	mA
Pulse Forward Current	IFP	100*1	120*1	mA
Reverse Voltage	VR	5	5	V
Power Dissipation	PD	120	120	mW
Operating Temperature	Topr	-30~+85	-30~+85	°C
Storage Temperature	Tstg	-40~+100	-40~+100	°C

*1 Pulse width Max. 10ms Duty ratio max 1/10

Package Outlines

(Unit:mm)



Electrical and Optical Characteristics

Part Number*2	Emitting Color	Lens Type	Forward Voltage VF(V)		Dominant Wavelength λd (nm)*4		Luminous Intensity Iv (mcd)*3		Reverse Current IR (μA) at Vr=5V		
			Working Current:IF=20mA								
			Typ.	Max.	Typ.	Max.	Typ.	Max.			
OSTA71B1D	Red	Water Clear	2.0	2.4	625	630	1120	1560	<10		
	Pure Green		3.3	3.8	525	535	1560	3000			
	Blue		3.3	3.8	470	475	750	1120			
OSTA71B2D	Red	White Diffused	2.0	2.4	625	630	200	300	<10		
	Pure Green		3.3	3.8	525	535	550	700			
	Blue		3.3	3.8	470	475	150	300			

*2 See table for Luminous Intensity Ranks

*3 Axial Direction (Luminous Intensity)

*4 Devices are sorted by 5nm wavelength ranges

Package

- Bulk..... 100pieces/bag (Code No.1)
- Bulk..... 200pieces/bag (Code No.2)
- Bulk..... 500pieces/bag (Code No.5)
- Bulk..... 1000pieces/bag (Code No.10)

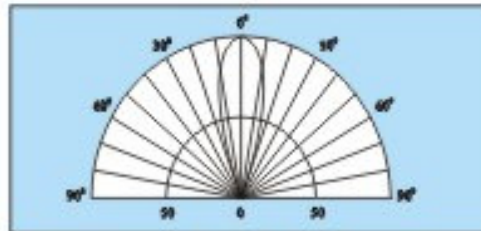
Sign Series



Characters

- Viewing angle 30 deg

Directive Characteristics (T_a=25°C)



Relative Luminous Intensity

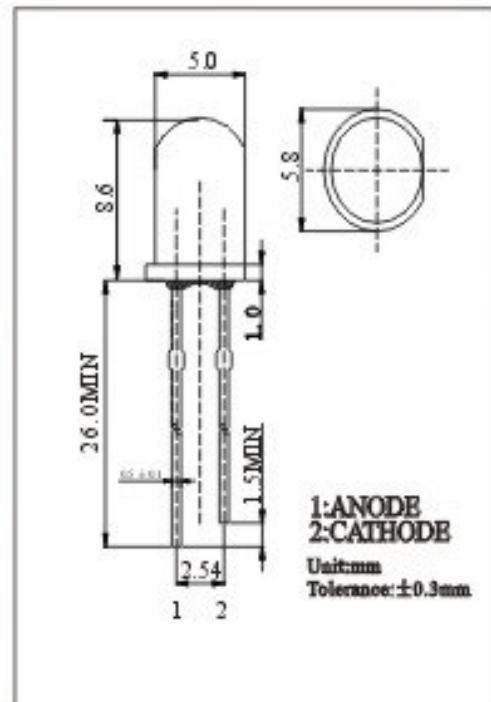
Absolute Maximum Ratings (T_a=25°C)

Item	Symbol	Value		Unit
		BG	ER/BY	
DC Forward Current	I _F	30	50	mA
Pulse Forward Current	I _{FF}	100*1	120*1	mA
Reverse Voltage	V _R	5	5	V
Power Dissipation	P _D	120	120	mW
Operating Temperature	T _{opr}	-30~+85	-30~+85	°C
Storage Temperature	T _{stg}	-40~+100	-40~+100	°C

*1 Pulse width Max. 10ms Duty ratio max 1/10

Package Outlines

(Unit:mm)



Round

Electrical and Optical Characteristics

Part Number*2	Emitting Color	Lens Type	Forward Voltage V _F (V)		Dominant Wavelength λ _d (nm)*4		Luminous Intensity I _v (mcd)*3		Reverse Current I _R (μA) at V _R =5V		
			Working Current: I _F =20mA								
			Typ.	Max.	Typ.	Max.	Typ.	Max.			
OSBG5131A	Bluish Green	Water Clear	3.3	3.8	505	510	6000	7500	<10		
OSBY5131A	Yellow	Water Clear	2.0	2.4	590	595	4200	5300	<10		
OSBR5131A	Red	Water Clear	2.0	2.4	625	630	4200	5300	<10		

*2 See table for Luminous Intensity Ranks

*3 Axial Direction (Luminous Intensity)

*4 Devices are sorted by 5nm wavelength ranges

Package

Bulk.....	100pieces/bag	(Code No.1)
Bulk.....	200pieces/bag	(Code No.2)
Bulk.....	500pieces/bag	(Code No.5)
Bulk.....	1000pieces/bag	(Code No.10)

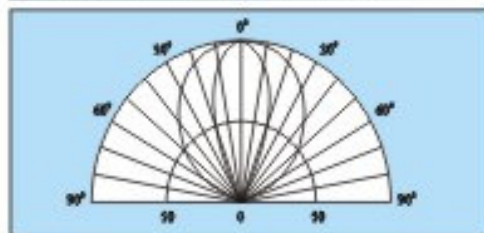
Mono-Color/3.9×3.1mm Series



Character

- Viewing angle 100/40 deg

Directive Characteristic (Ta=25°C)



Relative Luminous Intensity

Absolute Maximum Ratings (Ta=25°C)

Item	Symbol	Value		Unit
		PG/UB/SV	HR/OR/YL	
DC Forward Current	IF	30	50	mA
Pulse Forward Current	IFP	100*1	120*1	mA
Reverse Voltage	VR	5	5	V
Power Dissipation	PD	120	120	mW
Operating Temperature	Topr	-30~+85	-30~+85	°C
Storage Temperature	Tstg	-40~+100	-40~+100	°C

*1 Pulse width Max.10ms Duty ratio max 1/10

Electrical and Optical Characteristics

Part Number*2	Emitting Color	Lens Type	Forward Voltage VF (V)		Chromaticity Coordinates*4				Luminous Intensity Iv (mcd)*3		Reverse Current IR (μA) at Vr=5V
			Typ.	Max.	x		y		Typ.	Max.	
					Min.	Max.	Min.	Max.			
Working Current:IF=20mA											
OSPW43A1D	White	Water Clear	3.3	3.8	0.22	0.32	0.24	0.34	1000	1500	<10
OSPE43A1D	Pink	Water Clear	3.3	3.8	0.35	0.45	0.15	0.25	100	300	<10

Electrical and Optical Characteristics

Part Number*2	Emitting Color	Lens Type	Forward Voltage VF(V)		Dominant Wavelength λd (nm)*5		Luminous Intensity Iv (mcd)*3		Reverse Current IR (μA) at Vr=5V
			Typ.	Max.	Typ.	Max.	Typ.	Max.	
OSUB43A1D	Blue	Water Clear	3.3	3.8	470	475	500	750	<10
OSPG43A1D	Pure Green	Water Clear	3.3	3.8	525	535	2100	4200	<10
OSV43A1D	Violet	Water Clear	3.5	3.8	405	410	35	60	<10
OSYL43A1D	Yellow	Water Clear	2.0	2.4	590	595	750	1120	<10
OSOR43A1D	Orange	Water Clear	2.0	2.4	605	610	750	1120	<10
OSHR43A1D	High Red	Water Clear	2.0	2.4	625	630	750	1120	<10

*2 See table for Luminous Intensity Ranks

*3 Axial Direction (Luminous Intensity)

*4 Please refer to CIE 1931 chromaticity diagram

*5 Devices are sorted by 5nm wavelength ranges

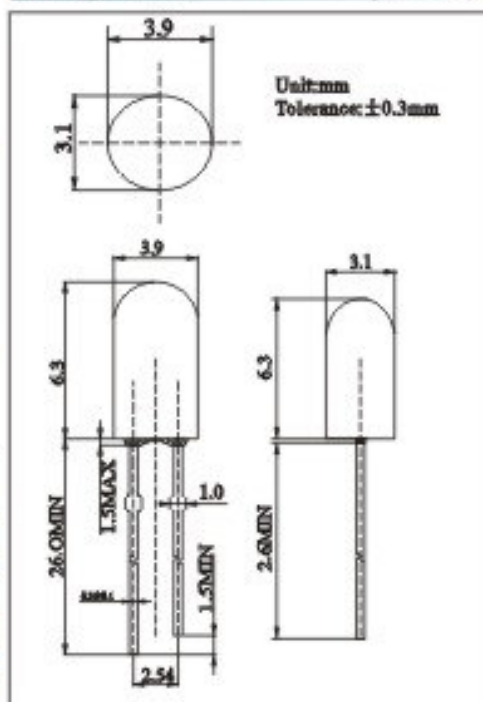
*6 Other types please refer to photo

Package

Bulk.....	100pieces/bag	(Code No.1)
Bulk.....	200pieces/bag	(Code No.2)
Bulk.....	500pieces/bag	(Code No.5)
Bulk.....	1000pieces/bag	(Code No.10)

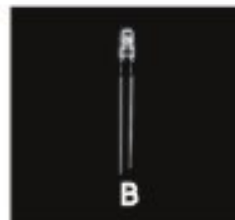
Package Outlines

(Unit:mm)



Oval

*6



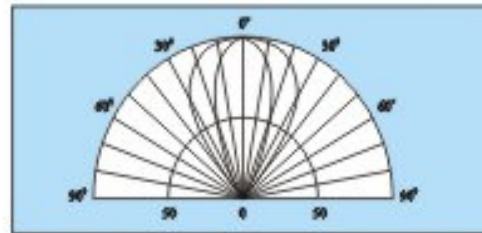
Mono-Color/4.7×5.7mm Series



Characters

- Viewing angle 40/70 deg

Directive Characteristics (Ta=25°C)



Relative Luminous Intensity

Absolute Maximum Ratings (Ta=25°C)

Item	Symbol	Value		Unit
		PG/UB/SV	HR/OR/YL	
DC Forward Current	IF	30	50	mA
Pulse Forward Current	IFP	100 ^{*1}	120 ^{*1}	mA
Reverse Voltage	VR	5	5	V
Power Dissipation	PD	120	120	mW
Operating Temperature	T _{opr}	-30~+85	-30~+85	°C
Storage Temperature	T _{stg}	-40~+100	-40~+100	°C

*1 Pulse width Max. 10ms Duty ratio max 1/10

Electrical and Optical Characteristics

Part Number ^{*2}	Emitting Color	Lens Type	Forward Voltage VF (V)		Chromaticity Coordinates ^{*4}				Luminous Intensity Iv (mcd) ^{*5}		Reverse Current IR (μA) at Vr=5V
			Typ.	Max.	x		y		Typ.	Max.	
					Min.	Max.	Min.	Max.			
Working Current: IF=20mA											
OSPW4571D	White	Water Clear	3.3	3.3	0.22	0.32	0.24	0.34	2180	3000	<10
OSPE4571D	Pink	Water Clear	3.3	3.3	0.35	0.45	0.15	0.25	300	600	<10

Electrical and Optical Characteristics

Part Number ^{*2}	Emitting Color	Lens Type	Forward Voltage VF (V)		Dominant Wavelength λd (nm) ^{*3}		Luminous Intensity Iv (mcd) ^{*5}		Reverse Current IR (μA) at Vr=5V
			Typ.	Max.	Typ.	Max.	Typ.	Max.	
OSUB4571D	Blue	Water Clear	3.3	3.3	470	475	1200	2000	<10
OSPG4571D	Pure Green	Water Clear	3.3	3.3	525	535	3000	6000	<10
OSV4571D	Violet	Water Clear	3.5	3.3	405	410	60	100	<10
OSYL4571D	Yellow	Water Clear	2.0	2.4	590	595	1560	2180	<10
OSOR4571D	Orange	Water Clear	2.0	2.4	605	610	1560	2180	<10
OSHR4571D	High Red	Water Clear	2.0	2.4	625	630	1560	2180	<10

*2 See table for Luminous Intensity Ranks

*3 Axial Direction (Luminous Intensity)

*4 Please refer to CIE 1931 chromaticity diagram

*5 Devices are sorted by 5nm wavelength ranges

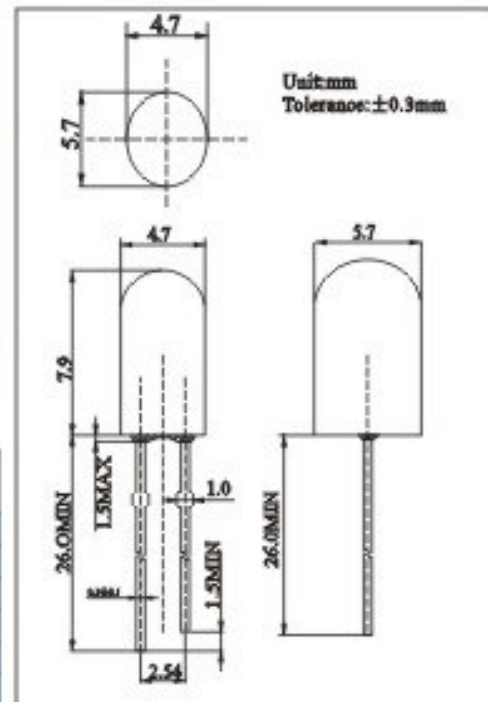
*6 Other types please refer to photo

Package

Bulk.....	100pieces/bag	(Code No.1)
Bulk.....	200pieces/bag	(Code No.2)
Bulk.....	500pieces/bag	(Code No.5)
Bulk.....	1000pieces/bag	(Code No.10)

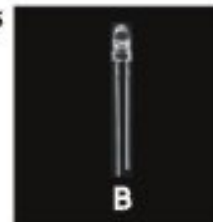
Package Outlines

(Unit:mm)



Oval

*6



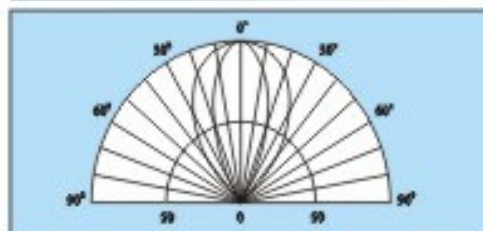
Mono-Color/5.0×4.1mm Series



Characters

- Viewing angle 70/40 deg

Directive Characteristics (T_a=25°C)



Relative Luminous Intensity

Absolute Maximum Ratings (T_a=25°C)

Item	Symbol	Value		Unit
		PG/UB/SV	HR/OR/YL	
DC Forward Current	I _F	30	50	mA
Pulse Forward Current	I _{PF}	100*1	120*1	mA
Reverse Voltage	V _R	5	5	V
Power Dissipation	P _D	120	120	mW
Operating Temperature	T _{opr}	-30~+85	-30~+85	°C
Storage Temperature	T _{stg}	-40~+100	-40~+100	°C

*1 Pulse width Max. 10ms Duty ratio max 1/10

Electrical and Optical Characteristics

Part Number*2	Emitting Color	Lens Type	Forward Voltage V _F (V)		Chromaticity Coordinates*4				Luminous Intensity I _v (mcd)*3		Reverse Current I _R (μA) at V _R =5V
			Typ.	Max.	Min.	Max.	Min.	Max.	Typ.	Max.	
OSPW5471D	White	Water Clear	3.3	3.8	0.22	0.32	0.24	0.34	2180	3000	<10
OSPK5471D	Pink	Water Clear	3.3	3.8	0.35	0.45	0.15	0.25	300	600	<10

Electrical and Optical Characteristics

Part Number*2	Emitting Color	Lens Type	Forward Voltage V _F (V)		Dominant Wavelength λ _d (nm)*2		Luminous Intensity I _v (mcd)*2		Reverse Current I _R (μA) at V _R =5V
			Typ.	Max.	Typ.	Max.	Typ.	Max.	
OSUB5471D	Blue	Water Clear	3.3	3.8	470	475	1200	2000	<10
OSPG5471D	Pure Green	Water Clear	3.3	3.8	525	535	3000	6000	<10
OSBV5471D	Violet	Water Clear	3.5	3.8	405	410	60	100	<10
OSYL5471D	Yellow	Water Clear	2.0	2.4	590	595	1560	2180	<10
OSOR5471D	Orange	Water Clear	2.0	2.4	605	610	1560	2180	<10
OSBR5471D	High Red	Water Clear	2.0	2.4	625	630	1560	2180	<10

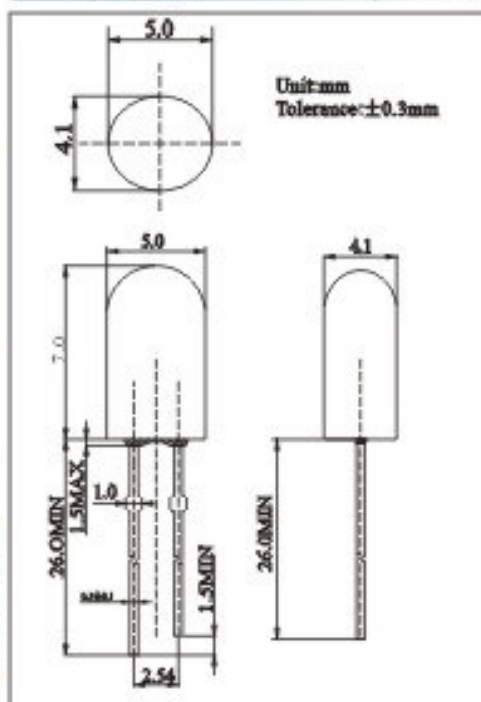
- *2 See table for Luminous Intensity Ranks
- *3 Axial Direction (Luminous Intensity)
- *4 Please refer to CIE 1931 chromaticity diagram
- *5 Devices are sorted by 5nm wavelength ranges
- *6 Other types please refer to photo

Package

- Bulk..... 100pieces/bag (Code No.1)
- Bulk..... 200pieces/bag (Code No.2)
- Bulk..... 500pieces/bag (Code No.5)
- Bulk..... 1000pieces/bag (Code No.10)

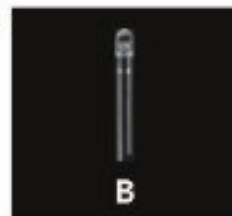
Package Outlines

(Unit:mm)



Oval

*6



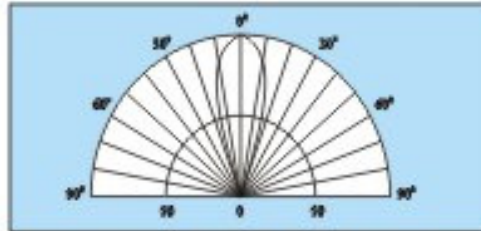
Φ3 Mono-Color Flashing Series



Character

- Viewing angle 30 deg

Directive Characteristic (Ta=25°C)



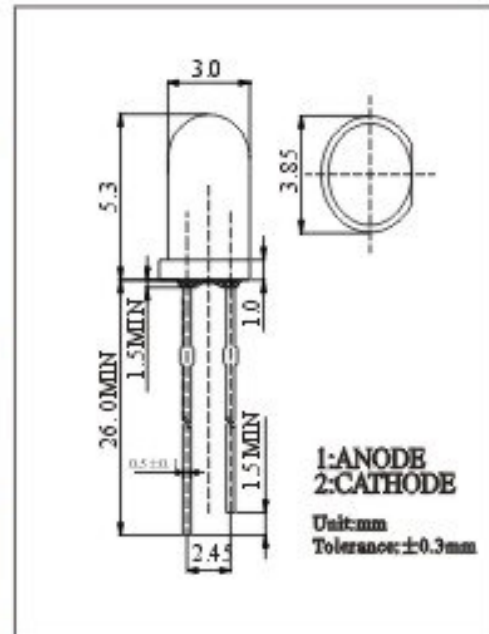
Relative Luminous Intensity

Absolute Maximum Ratings (Ta=25°C)

Item	Symbol	Value		Unit
		PG/UB/UV	HR/OR/YL	
Frequency	F	1.3	1.3	Hz
Power Supply	V	5.0	3.5	V
Operating Temperature	Topr	-30~+85	-30~+85	°C
Storage Temperature	Tstg	-40~+100	-40~+100	°C

Package Outlines

(Unit:mm)



Round

Electrical and Optical Characteristics

Part Number ^{*2}	Emitting Color	Lens Type	Forward Voltage VF(V)		Dominant Wavelength λd (nm) ^{*4}		Luminous Intensity Iv (mcd) ^{*3}		Reverse Current IR (μA) at Vr=5V
			Typ.	Max.	Typ.	Max.	Typ.	Max.	
OSUB3X31A	Blue	Water Clear	4.5	5.0	470	475	1500	2800	<10
OSPG3X31A	Pure Green	Water Clear	4.5	5.0	525	535	4200	6000	<10
OSBG3X31A	Bluish Green	Water Clear	4.5	5.0	505	510	4200	6000	<10
OSYL3X31A	Yellow	Water Clear	3.0	3.5	590	595	1400	2800	<10
OSOR3X31A	Orange	Water Clear	3.0	3.5	605	610	1400	2800	<10
OSBR3X31A	High Red	Water Clear	3.0	3.5	625	630	1400	2800	<10

*2 See table for Luminous Intensity Ranks

*3 Axial Direction (Luminous Intensity)

*4 Devices are sorted by 5nm wavelength ranges

*5 Other types please refer to photo

Package

Bulk.....	100pieces/bag	(Code No.1)
Bulk.....	200pieces/bag	(Code No.2)
Bulk.....	500pieces/bag	(Code No.5)
Bulk.....	1000pieces/bag	(Code No.10)

*5



Φ 5 Mono-Color Flashing Series

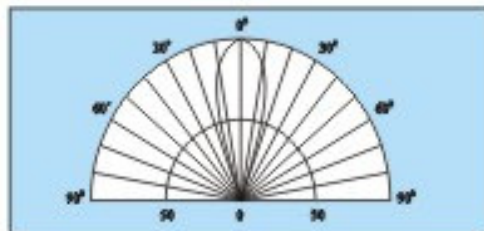
Round



Characters

- Viewing angle 30 deg

Directive Characteristics (T_a=25°C)

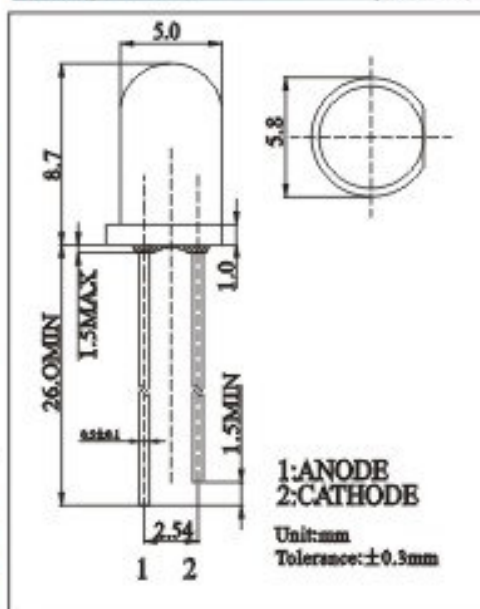


Relative Luminous Intensity

Absolute Maximum Ratings (T_a=25°C)

Item	Symbol	Value		Unit
		PG/UB/SV	HR/OR/YL	
Frequency	F	1.3	1.3	Hz
Power Supply	V	5.0	3.5	V
Operating Temperature	T _{opr}	-30~+85	-30~+85	°C
Storage Temperature	T _{stg}	-40~+100	-40~+100	°C

Package Outlines (Unit:mm)



Electrical and Optical Characteristics

Part Number*2	Emitting Color	Lens Type	Forward Voltage V _F (V)		Dominant Wavelength λ _d (nm)*4		Luminous Intensity I _v (mcd)*3		Reverse Current I _R (μA) at V _r =5V		
			Working Current: I _F =20mA								
			Typ.	Max.	Typ.	Max.	Typ.	Max.			
O6UB5X31A	Blue	Water Clear	4.5	5.0	470	475	2000	3800	<10		
OSPG5X31A	Pure Green	Water Clear	4.5	5.0	525	535	6000	10000	<10		
OHBG5X31A	Bluish Green	Water Clear	4.5	5.0	505	510	6000	10000	<10		
OSYL5X31A	Yellow	Water Clear	3.0	3.5	590	595	2200	4000	<10		
OSOR5X31A	Orange	Water Clear	3.0	3.5	605	610	2200	4000	<10		
O6ER5X31A	High Red	Water Clear	3.0	3.5	625	630	2200	4000	<10		

- *2 See table for Luminous Intensity Ranks
- *3 Axial Direction (Luminous Intensity)
- *4 Devices are sorted by 5nm wavelength ranges
- *5 Other types please refer to photo

Package

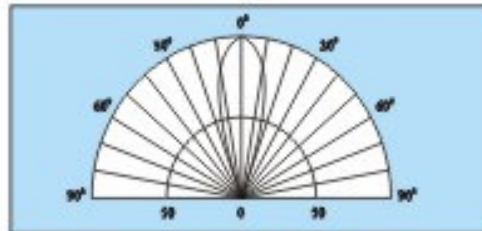
- Bulk..... 100pieces/bag (Code No.1)
- Bulk..... 200pieces/bag (Code No.2)
- Bulk..... 500pieces/bag (Code No.5)
- Bulk..... 1000pieces/bag (Code No.10)



Φ5 Bi-Color Flashing Series


Character

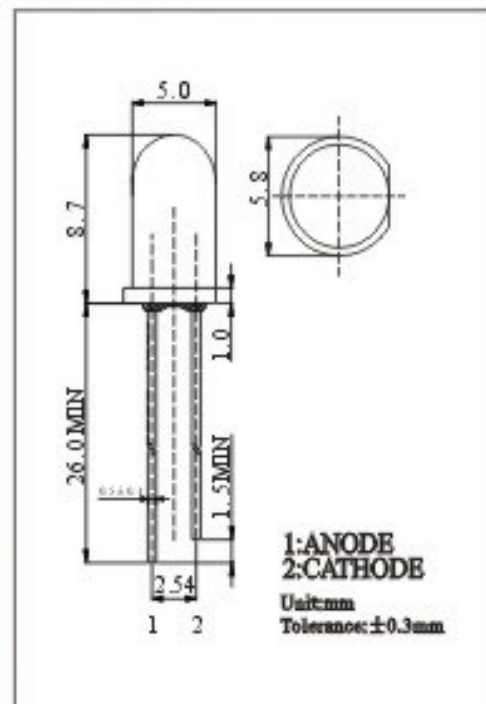
- Viewing angle 30 deg

Directive Characteristics (Ta=25°C)


Relative Luminous Intensity

Package Outlines

(Unit:mm)


Absolute Maximum Ratings (Ta=25°C)

Item	Symbol	Value		Unit
		PG/UB/SV	HR/OR/YL	
Frequency	F	1.3	1.3	Hz
Power Supply	V	5.0	3.8	V
Operating Temperature	Topr	-30~+85	-30~+85	°C
Storage Temperature	Tstg	-40~+100	-40~+100	°C

Electrical and Optical Characteristics

Part Number*2	Emitting Color	Lens Type	Forward Voltage VF(V)		Dominant Wavelength λd (nm)*4		Luminous Intensity Iv (mcd)*3		Reverse Current IR (μA) at Vr=5V		
			Working Current:IF=20mA								
			Typ.	Max.	Typ.	Max.	Typ.	Max.			
08RG5131A-IC	Red	Water Clear	3.3	3.8	625	630	2200	4000	<10		
	Yellow Green	Water Clear	3.3	3.8	570	575	1000	1500	<10		
08RB5131A-IC	Red	Water Clear	3.3	3.8	625	630	2200	4000	<10		
	Blue	Water Clear	4.5	5.0	470	475	2000	3800	<10		
08RP5131A-IC	Red	Water Clear	3.3	3.8	625	630	2200	4000	<10		
	Pure Green	Water Clear	4.5	5.0	525	535	6000	10000	<10		
08YG5131A-IC	Yellow	Water Clear	3.3	3.8	590	595	2200	4000	<10		
	Yellow Green	Water Clear	3.3	3.8	570	575	1000	1500	<10		
08YP5131A-IC	Yellow	Water Clear	3.3	3.8	590	595	2200	4000	<10		
	Pure Green	Water Clear	4.5	5.0	525	535	6000	10000	<10		
08YB5131A-IC	Yellow	Water Clear	3.3	3.8	590	595	2200	4000	<10		
	Blue	Water Clear	4.5	5.0	470	475	2000	3800	<10		
08OG5131A-IC	Orange	Water Clear	3.3	3.8	605	610	2200	4000	<10		
	Yellow Green	Water Clear	3.3	3.8	570	575	1000	1500	<10		

*2 See table for Luminous Intensity Ranks

*3 Axial Direction (Luminous Intensity)

*4 Devices are sorted by 5nm wavelength ranges

Package

- Bulk..... 100pieces/bag (Code No.1)
- Bulk..... 200pieces/bag (Code No.2)
- Bulk..... 500pieces/bag (Code No.5)
- Bulk..... 1000pieces/bag (Code No.10)

Φ 5 Full Color Flashing Series

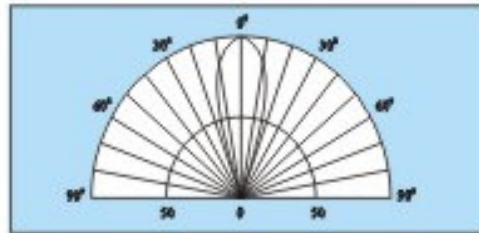
Round



Characters

- Viewing angle 30 deg

Directive Characteristics (T_a=25°C)

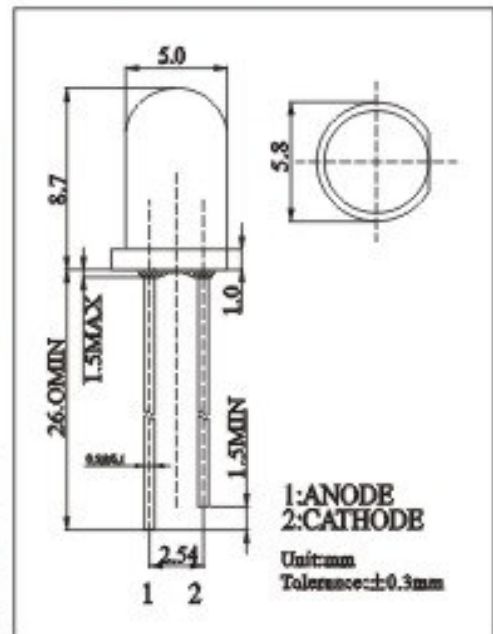


Relative Luminous Intensity

Absolute Maximum Ratings (T_a=25°C)

Item	Symbol	Value		Unit
		PG/UB/SV	HR/OR/YL	
Frequency	F	1.3	1.3	Hz
Power Supply	V	5.0	3.8	V
Operating Temperature	T _{opr}	-30~+85	-30~+85	°C
Storage Temperature	T _{stg}	-40~+100	-40~+100	°C

Package Outlines (Unit:mm)



Electrical and Optical Characteristics

Part Number ^{*2}	Emitting Color	Lens Type	Forward Voltage VF(V)		Dominant Wavelength λ d (nm) ^{*4}		Luminous Intensity I _v (mcd) ^{*3}		Reverse Current I _R (μA) at V _r =5V
			Typ.	Max.	Typ.	Max.	Typ.	Max.	
08TB5131A	Red	Water Clear	3.3	3.8	625	630	2200	4000	<10
	Blue		4.5	5.0	470	475	2000	3800	
	Pure Green		4.5	5.0	525	535	6000	1000	
08TB5132A	Red	White Diffused	3.3	3.8	625	630	600	1000	<10
	Blue		4.5	5.0	470	475	500	800	
	Pure Green		4.5	5.0	525	535	1000	3000	

Electrical and Optical Characteristics

Part Number ^{*2}	Emitting Color	Lens Type	Forward Voltage VF(V)		Dominant Wavelength λ d (nm) ^{*4}		Luminous Intensity I _v (mcd) ^{*3}		Reverse Current I _R (μA) at V _r =5V
			Typ.	Max.	Typ.	Max.	Typ.	Max.	
08TC5131A	Red	Water Clear	3.3	3.8	625	630	2200	4000	<10
	Blue		4.5	5.0	470	475	2000	3800	
	Pure Green		4.5	5.0	525	535	6000	10000	
08TC5132A	Red	White Diffused	3.3	3.8	625	630	600	1000	<10
	Blue		4.5	5.0	470	475	500	800	
	Pure Green		4.5	5.0	525	535	1000	3000	

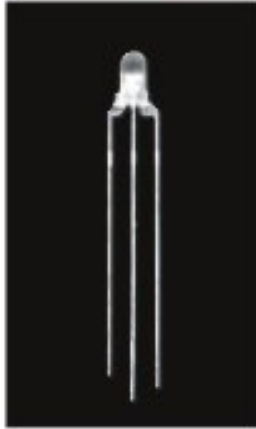
- *2 See table for Luminous Intensity Ranks
- *3 Axial Direction (Luminous Intensity)
- *4 Devices are sorted by 5nm wavelength ranges
- *5 Other types please refer to photo

Package

Bulk.....	100pieces/bag	(Code No.1)
Bulk.....	200pieces/bag	(Code No.2)
Bulk.....	500pieces/bag	(Code No.5)
Bulk.....	1000pieces/bag	(Code No.10)



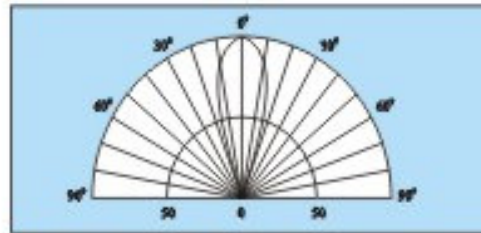
Bi-Color / $\Phi 3$ Series



Character

- Viewing angle 30 deg

Directive Characteristics (Ta=25°C)



Relative Luminous Intensity

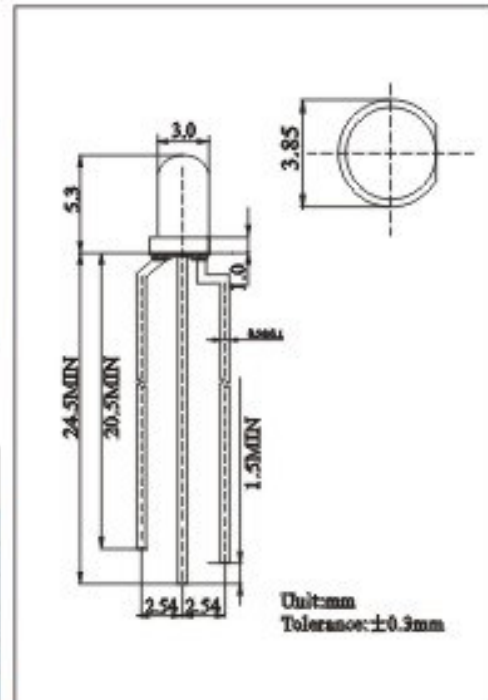
Absolute Maximum Ratings (Ta=25°C)

Item	Symbol	Value		Unit
		PG/UB/8V	HR/OR/YL	
DC Forward Current	IF	30	50	mA
Pulse Forward Current	IFP	100*1	120*1	mA
Reverse Voltage	VR	5	5	V
Power Dissipation	PD	120	120	mW
Operating Temperature	Topr	-30~+85	-30~+85	°C
Storage Temperature	Tstg	-40~+100	-40~+100	°C

*1 Pulse width Max. 10ms Duty ratio max 1/10

Package Outlines

(Unit:mm)



Round

Electrical and Optical Characteristics

Part Number*2	Emitting Color	Lens Type	Forward Voltage VF (V)		Dominant Wavelength λd (nm)*4		Luminous Intensity Iv (mcd)*3		Reverse Current IR (μA) at Vr=5V		
			Working Current: IF=20mA								
			Typ.	Max.	Typ.	Max.	Typ.	Max.			
OSRG3131A	Red	Water Clear	2.0	2.4	625	630	500	1000	<10		
	Yellow Green		2.0	2.4	570	575	330	600			
OSRB3131A	Red	Water Clear	2.0	2.4	625	630	1000	1500	<10		
	Blue		3.3	3.3	470	475	1200	1800			
OSYG3131A	Yellow	Water Clear	2.0	2.4	590	595	500	1000	<10		
	Yellow Green		2.0	2.4	570	575	330	600			
OSRG3132A	Red	White Diffused	2.0	2.4	625	630	200	300	<10		
	Yellow Green		2.0	2.4	570	575	150	250			
OSRB3132A	Red	White Diffused	2.0	2.4	625	630	200	300	<10		
	Blue		3.3	3.3	470	475	250	450			
OSYG3132A	Yellow	White Diffused	2.0	2.4	590	595	200	300	<10		
	Yellow Green		2.0	2.4	570	575	150	250			

*2 See table for Luminous Intensity Ranks

*3 Axial Direction (Luminous Intensity)

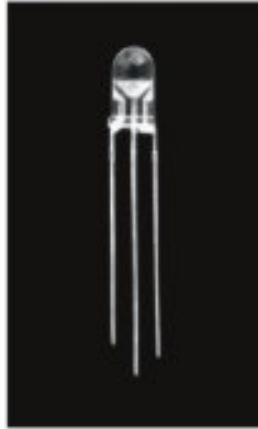
*4 Devices are sorted by 5nm wavelength ranges

Package

Bulk.....	100pieces/bag	(Code No.1)
Bulk.....	200pieces/bag	(Code No.2)
Bulk.....	500pieces/bag	(Code No.5)
Bulk.....	1000pieces/bag	(Code No.10)

Bi-Color / $\Phi 5$ Series

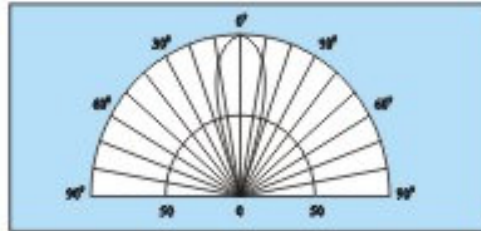
Round



Characters

- Viewing angle 30 deg

Directive Characteristics (Ta=25°C)



Relative Luminous Intensity

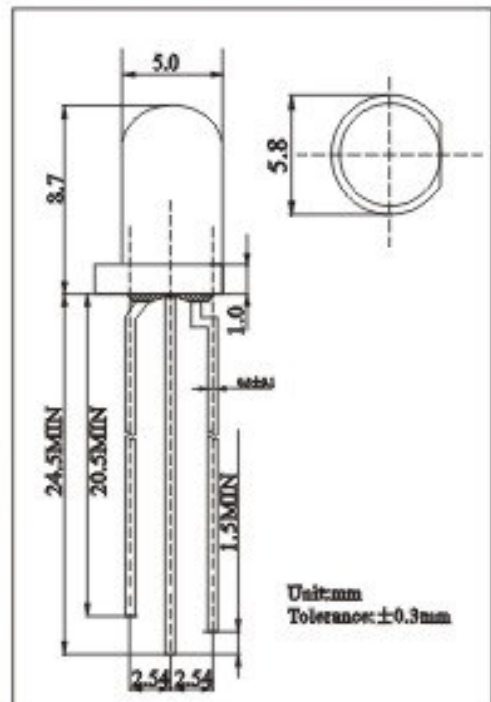
Absolute Maximum Ratings (Ta=25°C)

Item	Symbol	Value		Unit
		PG/UB/SV	HR/OR/YL	
DC Forward Current	IF	30	50	mA
Pulse Forward Current	IFP	100*1	120*1	mA
Reverse Voltage	VR	5	5	V
Power Dissipation	PD	120	120	mW
Operating Temperature	T _{opr}	-30~+85	-30~+85	°C
Storage Temperature	T _{stg}	-40~+100	-40~+100	°C

*1 Pulse width Max. 10ms Duty ratio max 1/10

Package Outlines

(Unit:mm)



Electrical and Optical Characteristics

Part Number*2	Emitting Color	Lens Type	Forward Voltage VF(V)		Dominant Wavelength λd (nm)*4		Luminous Intensity Iv (mcd)*3		Reverse Current IR (μ A) at Vr=5V		
			Working Current:IF=20mA								
			Typ.	Max.	Typ.	Max.	Typ.	Max.			
OSRG5131A	Red	Water Clear	2.0	2.4	625	630	1500	2000	<10		
	Yellow Green		2.0	2.4	570	575	800	1000			
OSRB5131A	Red	Water Clear	2.0	2.4	625	630	1500	2000	<10		
	Blue		3.3	3.8	470	475	1800	3200			
OSYG5131A	Yellow	Water Clear	2.0	2.4	590	595	1000	1500	<10		
	Yellow Green		2.0	2.4	570	575	800	1000			
OSRG5132A	Red	White Diffused	2.0	2.4	625	630	350	600	<10		
	Yellow Green		2.0	2.4	570	575	250	400			
OSRB5132A	Red	White Diffused	2.0	2.4	625	630	350	600	<10		
	Blue		3.3	3.8	470	475	450	600			
OSYG5132A	Yellow	White Diffused	2.0	2.4	590	595	300	400	<10		
	Yellow Green		2.0	2.4	570	575	250	400			

*2 See table for Luminous Intensity Ranks

*3 Axial Direction (Luminous Intensity)

*4 Devices are sorted by 5nm wavelength ranges

Package

Bulk	100pieces/bag	(Code No.1)
Bulk	200pieces/bag	(Code No.2)
Bulk	500pieces/bag	(Code No.5)
Bulk	1000pieces/bag	(Code No.10)

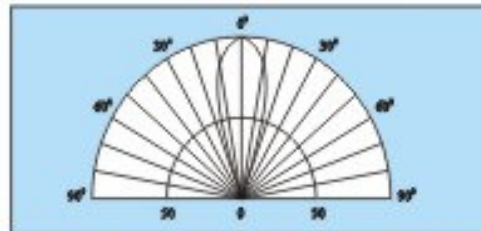
Φ 5 Full Color Series



Characters

- Viewing angle 30 deg

Directive Characteristics (T_a=25°C)



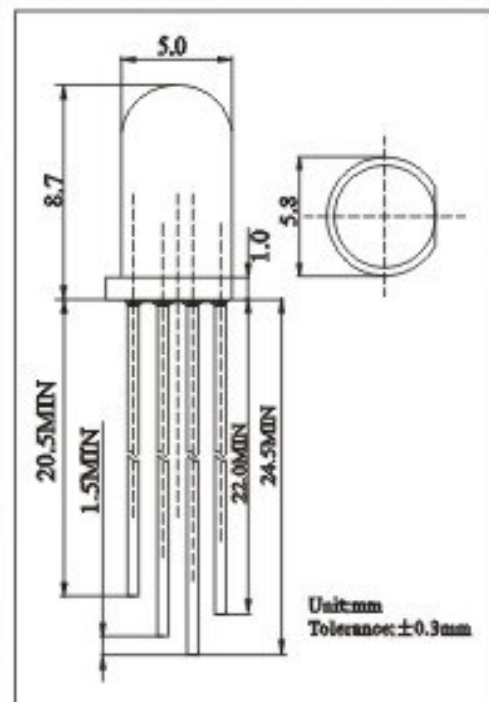
Relative Luminous Intensity

Absolute Maximum Ratings (T_a=25°C)

Item	Symbol	Value		Unit
		PG/UB/SV	HR/OR/YL	
DC Forward Current	I _F	30	50	mA
Pulse Forward Current	I _{PF}	100 ^{*1}	120 ^{*1}	mA
Reverse Voltage	V _R	5	5	V
Power Dissipation	P _D	120	120	mW
Operating Temperature	T _{OP}	-30~+85	-30~+85	°C
Storage Temperature	T _{stg}	-40~+100	-40~+100	°C

*1 Pulse width Max. 10ms Duty ratio max 1/10

Package Outlines (Unit:mm)



Round

Electrical and Optical Characteristics

Part Number ^{*2}	Emitting Color	Lens Type	Forward Voltage V _F (V)		Dominant Wavelength λ _d (nm) ^{*4}		Luminous Intensity I _v (mcd) ^{*3}		Reverse Current I _R (μA) at V _R =5V		
			Working Current: I _F =20mA								
			Typ.	Max.	Typ.	Max.	Typ.	Max.			
OSTA5131A	Red	Water Clear	2.0	2.4	625	630	1500	2000	<10		
	Blue		3.3	3.8	470	475	1800	3200			
	Pure Green		3.3	3.8	525	535	5000	8000			
OSTA5132A	Red	White Diffused	2.0	2.4	625	630	350	600	<10		
	Blue		3.3	3.8	470	475	450	600			
	Pure Green		3.3	3.8	525	535	600	1000			

*2 See table for Luminous Intensity Ranks

*3 Axial Direction (Luminous Intensity)

*4 Devices are sorted by 5nm wavelength ranges

*5 Other types please refer to photo

Package

Bulk.....	100pieces/bag	(Code No.1)
Bulk.....	200pieces/bag	(Code No.2)
Bulk.....	500pieces/bag	(Code No.5)
Bulk.....	1000pieces/bag	(Code No.10)



Mono-Color/Φ 1.8 Series

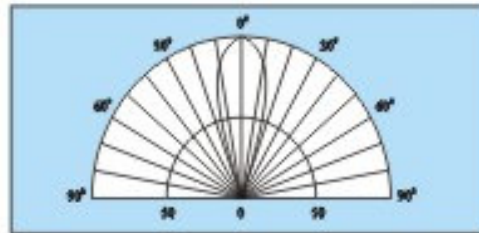
Round



Characters

- Viewing angle 30 deg

Directive Characteristics (T_s=25°C)



Relative Luminous Intensity

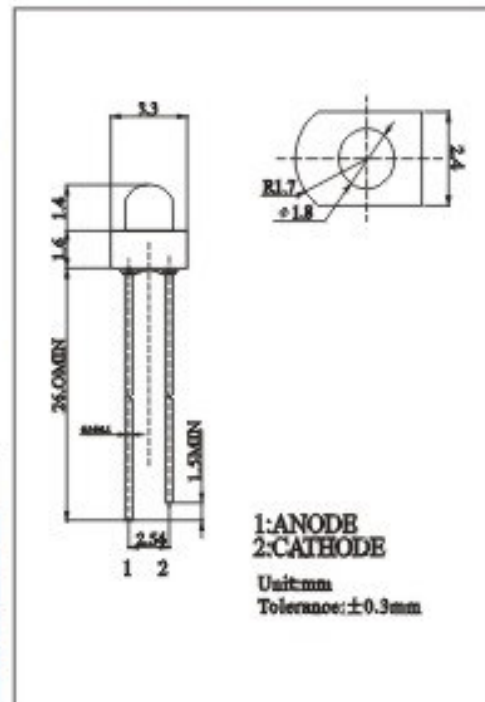
Absolute Maximum Ratings (T_s=25°C)

Item	Symbol	Value		Unit
		PG/UB/SV	HR/OR/YL	
DC Forward Current	I _F	30	50	mA
Pulse Forward Current	I _{PF}	100 ^{*1}	120 ^{*1}	mA
Reverse Voltage	V _R	5	5	V
Power Dissipation	P _D	120	120	mW
Operating Temperature	T _{opr}	-30~+85	-30~+85	°C
Storage Temperature	T _{stg}	-40~+100	-40~+100	°C

*1 Pulse width Max. 10ms Duty ratio max 1/10

Package Outlines

(Unit:mm)



Electrical and Optical Characteristics

Part Number ^{*2}	Emitting Color	Lens Type	Forward Voltage V _F (V)		Chromaticity Coordinates ^{*4}				Luminous Intensity I _v (mcd) ^{*3}		Reverse Current I _R (μA) at V _R =5V
			Typ.	Max.	x		y		Typ.	Max.	
					Min.	Max.	Min.	Max.			
Working Current: I _F =20mA											
OSPW7331A	White	Water Clear	3.3	3.8	0.22	0.32	0.24	0.34	2000	4000	<10
OSPK7331A	Pink	Water Clear	3.3	3.8	0.35	0.45	0.15	0.25	300	500	<10

Electrical and Optical Characteristics

Part Number ^{*2}	Emitting Color	Lens Type	Forward Voltage V _F (V)		Dominant Wavelength λ _d (nm) ^{*5}		Luminous Intensity I _v (mcd) ^{*3}		Reverse Current I _R (μA) at V _R =5V
			Typ.	Max.	Typ.	Max.	Typ.	Max.	
OSUB7331A	Blue	Water Clear	3.3	3.8	470	475	1120	1560	<10
OSPG7331A	Pure Green	Water Clear	3.3	3.8	525	535	3000	4200	<10
OSBV7331A	Violet	Water Clear	3.5	3.8	405	410	60	120	<10
OSYL7331A	Yellow	Water Clear	2.0	2.4	590	595	1120	1560	<10
OSOR7331A	Orange	Water Clear	2.0	2.4	605	610	1120	1560	<10
OSHR7331A	High Red	Water Clear	2.0	2.4	625	630	1120	1560	<10

- *2 See table for Luminous Intensity Ranks
- *3 Axial Direction (Luminous Intensity)
- *4 Please refer to CIE 1931 chromaticity diagram
- *5 Devices are sorted by 5nm wavelength ranges

Package

- Bulk..... 100pieces/bag (Code No.1)
- Bulk..... 200pieces/bag (Code No.2)
- Bulk..... 500pieces/bag (Code No.5)
- Bulk..... 1000pieces/bag (Code No.10)

Mono-Color/ Φ 3 Series

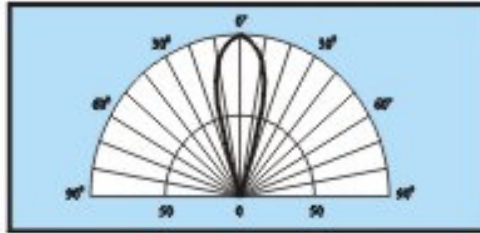
Round



Characters

- Viewing angle 30 deg

Directive Characteristics (T_a=25°C)



Relative Luminous Intensity

Absolute Maximum Ratings (T_a=25°C)

Item	Symbol	Value		Unit
		PG/UB/SV	HR/OR/YL	
DC Forward Current	I _F	30	50	mA
Pulse Forward Current	I _{FF}	100*1	120*1	mA
Reverse Voltage	V _R	5	5	V
Power Dissipation	P _D	120	120	mW
Operating Temperature	T _{opr}	-30~+85	-30~+85	°C
Storage Temperature	T _{stg}	-40~+100	-40~+100	°C

*1 Pulse width Max. 10ms Duty ratio max 1/10

Electrical and Optical Characteristics

Part Number*2	Emitting Color	Lens Type	Forward Voltage V _F (V)		Chromaticity Coordinates*4				Luminous Intensity I _v (mcd)*3		Reverse Current I _R (μA) at V _R =5V
			Working Current: I _F =20mA								
			Typ.	Max.	Min.	Max.	Min.	Max.	Typ.	Max.	
OSPW3131A	White	Water Clear	3.3	3.8	0.22	0.32	0.24	0.34	3000	5200	<10
OSPK3131A	Pink	Water Clear	3.3	3.8	0.35	0.45	0.15	0.25	500	800	<10

Electrical and Optical Characteristics

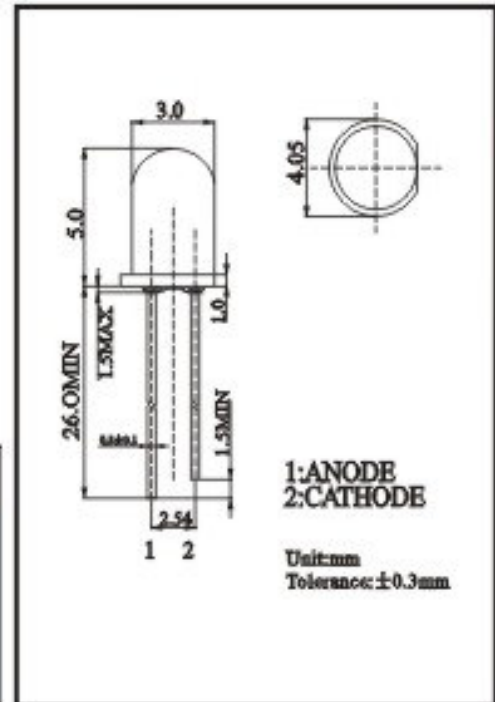
Part Number*2	Emitting Color	Lens Type	Forward Voltage V _F (V)		Dominant Wavelength λ _d (nm)*5		Luminous Intensity I _v (mcd)*3		Reverse Current I _R (μA) at V _R =5V
			Working Current: I _F =20mA						
			Typ.	Max.	Typ.	Max.	Typ.	Max.	
OSUB3131A	Blue	Water Clear	3.3	3.8	470	475	1560	3000	<10
OSPG3131A	Pure Green	Water Clear	3.3	3.8	525	535	4200	7000	<10
OSV3131A	Violet	Water Clear	3.5	3.8	405	410	100	150	<10
OSYL3131A	Yellow	Water Clear	2.0	2.4	590	595	1500	3000	<10
OSOR3131A	Orange	Water Clear	2.0	2.4	605	610	1500	3000	<10
OSHR3131A	High Red	Water Clear	2.0	2.4	625	630	1500	3000	<10

- *2 See table for Luminous Intensity Ranks
- *3 Axial Direction (Luminous Intensity)
- *4 Please refer to CIE 1931 chromaticity diagram
- *5 Devices are sorted by 5nm wavelength ranges
- *6 Other types please refer to photo and page 6

Package

Bulk.....	100pieces/bag	(Code No.1)
Bulk.....	200pieces/bag	(Code No.2)
Bulk.....	500pieces/bag	(Code No.5)
Bulk.....	1000pieces/bag	(Code No.10)

Package Outlines (Unit:mm)



Mono-Color/Φ 4 Series

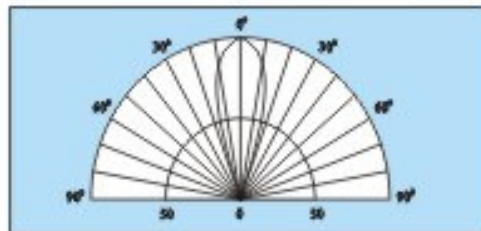
Round



Characters

- Viewing angle 30 deg

Directive Characteristics (T_a=25°C)



Relative Luminous Intensity

Absolute Maximum Ratings (T_a=25°C)

Item	Symbol	Value		Unit
		PG/UB/SV	HR/OR/YL	
DC Forward Current	I _F	30	50	mA
Pulse Forward Current	I _{PF}	100 ^{*1}	120 ^{*1}	mA
Reverse Voltage	V _R	5	5	V
Power Dissipation	P _D	120	120	mW
Operating Temperature	T _{opr}	-30~+85	-30~+85	°C
Storage Temperature	T _{stg}	-40~+100	-40~+100	°C

*1 Pulse width Max. 10ms Duty ratio max 1/10

Electrical and Optical Characteristics

Part Number ^{*2}	Emitting Color	Lens Type	Forward Voltage V _F (V)		Chromaticity Coordinates ^{*4}				Luminous Intensity I _v (mcd) ^{*3}		Reverse Current I _R (μA) at V _R =5V
			Typ.	Max.	Working Current: I _F =20mA		Typ.	Max.			
					Min.	Max.			Min.	Max.	
OSPW4131A	White	Water Clear	3.3	3.8	0.22	0.32	0.24	0.34	5000	8000	<10
OSPE4131A	Pink	Water Clear	3.3	3.8	0.35	0.45	0.15	0.25	800	1200	<10

Electrical and Optical Characteristics

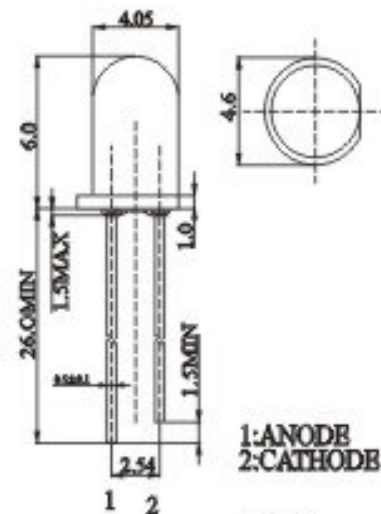
Part Number ^{*2}	Emitting Color	Lens Type	Forward Voltage V _F (V)		Dominant Wavelength λ _d (nm) ^{*5}		Luminous Intensity I _v (mcd) ^{*3}		Reverse Current I _R (μA) at V _R =5V
			Typ.	Max.	Typ.	Max.	Typ.	Max.	
OSUB4131A	Blue	Water Clear	3.3	3.8	470	475	3000	4200	<10
OSPG4131A	Pure Green	Water Clear	3.3	3.8	525	535	7000	10000	<10
OSBV4131A	Violet	Water Clear	3.5	3.8	405	410	100	200	<10
OSYL4131A	Yellow	Water Clear	2.0	2.4	590	595	2500	3500	<10
OSOR4131A	Orange	Water Clear	2.0	2.4	605	610	2500	3500	<10
OSHR4131A	High Red	Water Clear	2.0	2.4	625	630	2500	3500	<10

- *2 See table for Luminous Intensity Ranks
- *3 Axial Direction (Luminous Intensity)
- *4 Please refer to CIE 1931 chromaticity diagram
- *5 Devices are sorted by 5nm wavelength ranges

Package

- Bulk..... 100pieces/bag (Code No.1)
- Bulk..... 200pieces/bag (Code No.2)
- Bulk..... 500pieces/bag (Code No.5)
- Bulk..... 1000pieces/bag (Code No.10)

Package Outlines (Unit:mm)



1:ANODE
2:CATHODE

Unit:mm
Tolerance:±0.3mm

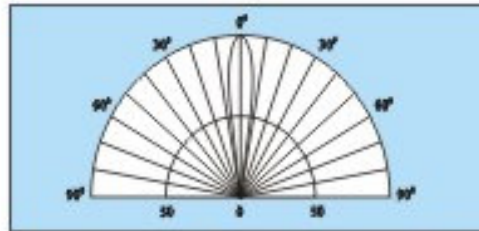
Mono-Color/Φ 5 Series



Characters

- Viewing angle 15 deg

Directive Characteristics (T_a=25°C)



Relative Luminous Intensity

Absolute Maximum Ratings (T_a=25°C)

Item	Symbol	Value		Unit
		PG/UB/SV	HR/OR/YL	
DC Forward Current	I _F	30	50	mA
Pulse Forward Current	I _{FF}	100*1	120*1	mA
Reverse Voltage	V _R	5	5	V
Power Dissipation	P _D	120	120	mW
Operating Temperature	T _{opr}	-30~+85	-30~+85	°C
Storage Temperature	T _{stg}	-40~+100	-40~+100	°C

*1 Pulse width Max. 10ms Duty ratio max 1/10

Electrical and Optical Characteristics

Part Number*2	Emitting Color	Lens Type	Forward Voltage V _F (V)		Chromaticity Coordinates*4				Luminous Intensity I _v (mcd)*3		Reverse Current I _R (μA) at V _R =5V
			Typ.	Max.	Working Current: I _F =20mA		Typ.	Max.			
					Min.	Max.			Min.	Max.	
OSPW5111A	White	Water Clear	3.3	3.8	0.22	0.32	0.24	0.34	8000	15000	<10
OSPE5111A	Pink	Water Clear	3.3	3.8	0.35	0.45	0.15	0.25	1500	2000	<10

Electrical and Optical Characteristics

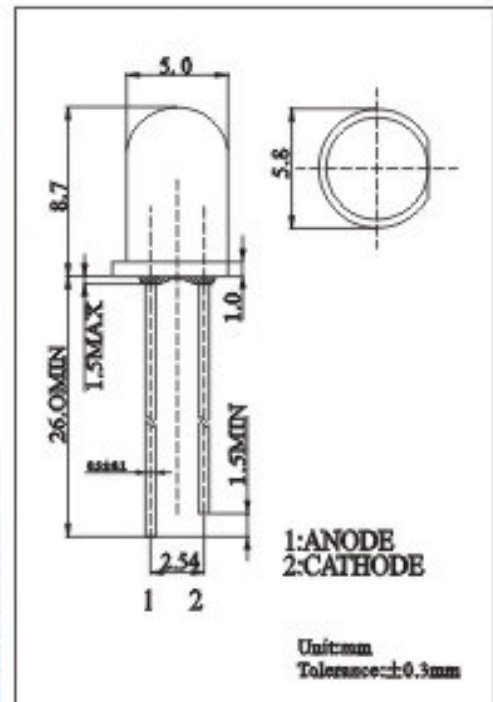
Part Number*2	Emitting Color	Lens Type	Forward Voltage V _F (V)		Dominant Wavelength λ _d (nm)*5		Luminous Intensity I _v (mcd)*3		Reverse Current I _R (μA) at V _R =5V
			Typ.	Max.	Typ.	Max.	Typ.	Max.	
OSUB5111A	Blue	Water Clear	3.3	3.8	470	475	3500	5000	<10
OSPG5111A	Pure Green	Water Clear	3.3	3.8	525	535	10000	13000	<10
OSSV5111A	Violet	Water Clear	3.5	3.8	405	410	200	300	<10
OSYL5111A	Yellow	Water Clear	2.0	2.4	590	595	3000	5000	<10
OSOR5111A	Orange	Water Clear	2.0	2.4	605	610	3000	5000	<10
OSHR5111A	High Red	Water Clear	2.0	2.4	625	630	3000	5000	<10

- *2 See table for Luminous Intensity Ranks
- *3 Axial Direction (Luminous Intensity)
- *4 Please refer to CIE 1931 chromaticity diagram
- *5 Devices are sorted by 5nm wavelength ranges
- *6 Other types please refer to photo and page 6

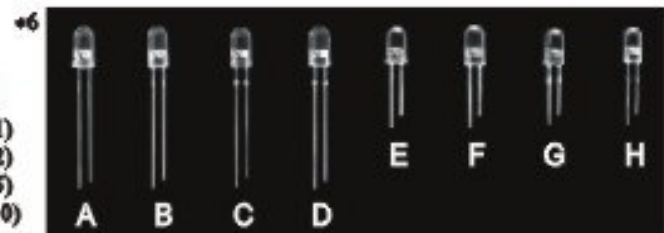
Package

Bulk.....	100pieces/bag	(Code No.1)
Bulk.....	200pieces/bag	(Code No.2)
Bulk.....	500pieces/bag	(Code No.5)
Bulk.....	1000pieces/bag	(Code No.10)

Package Outlines (Unit:mm)



Round



Mono-Color/ Φ 8 Series

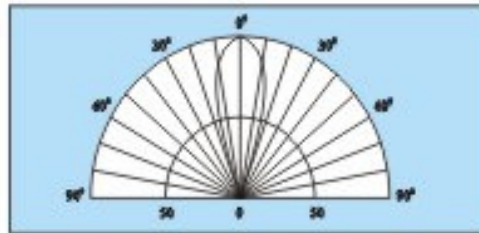
Round



Characters

- Viewing angle 30 deg

Directive Characteristics (T_a=25°C)



Relative Luminous Intensity

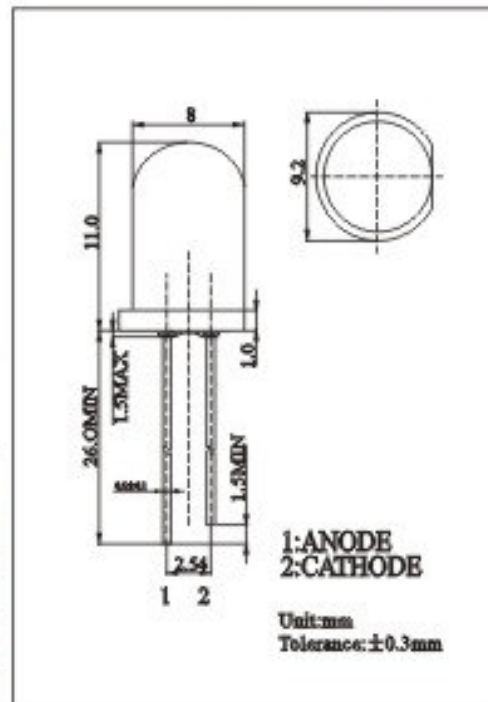
Absolute Maximum Ratings (T_a=25°C)

Item	Symbol	Value		Unit
		PG/UB/SV	HR/OR/YL	
DC Forward Current	I _F	30	50	mA
Pulse Forward Current	I _{PF}	100*1	120*1	mA
Reverse Voltage	V _R	5	5	V
Power Dissipation	P _D	120	120	mW
Operating Temperature	T _{opr}	-30~+85	-30~+85	°C
Storage Temperature	T _{stg}	-40~+100	-40~+100	°C

*1 Pulse width Max. 10ms Duty ratio max 1/10

Package Outlines

(Unit:mm)



Electrical and Optical Characteristics

Part Number*2	Emitting Color	Lens Type	Forward Voltage V _F (V)		Chromaticity Coordinates*4				Luminous Intensity I _v (mcd)*3		Reverse Current I _R (μA) at V _R =5V
			Working Current: I _F =20mA		x		y				
			Typ.	Max.	Min.	Max.	Min.	Max.	Typ.	Max.	
OSPW8131A	White	Water Clear	3.3	3.3	0.22	0.32	0.24	0.34	10000	15000	<10
OSPE8131A	Pink	Water Clear	3.3	3.3	0.35	0.45	0.15	0.25	2000	3000	<10

Electrical and Optical Characteristics

Part Number*2	Emitting Color	Lens Type	Forward Voltage V _F (V)		Dominant Wavelength λ _d (nm)*5		Luminous Intensity I _v (mcd)*3		Reverse Current I _R (μA) at V _R =5V
			Working Current: I _F =20mA						
			Typ.	Max.	Typ.	Max.	Typ.	Max.	
OSUB8131A	Blue	Water Clear	3.3	3.8	470	475	5000	7000	<10
OSPG8131A	Pure Green	Water Clear	3.3	3.8	525	535	13000	15000	<10
OSV8131A	Violet	Water Clear	3.5	3.8	405	410	300	400	<10
OSYL8131A	Yellow	Water Clear	2.0	2.4	590	595	4500	6000	<10
OSOR8131A	Orange	Water Clear	2.0	2.4	605	610	4500	6000	<10
OSHR8131A	High Red	Water Clear	2.0	2.4	625	630	4500	6000	<10

- *2 See table for Luminous Intensity Ranks
- *3 Axial Direction (Luminous Intensity)
- *4 Please refer to CIE 1931 chromaticity diagram
- *5 Devices are sorted by 5nm wavelength ranges

Package

- Bulk..... 100pieces/bag (Code No.1)
- Bulk..... 200pieces/bag (Code No.2)
- Bulk..... 500pieces/bag (Code No.5)
- Bulk..... 1000pieces/bag (Code No.10)

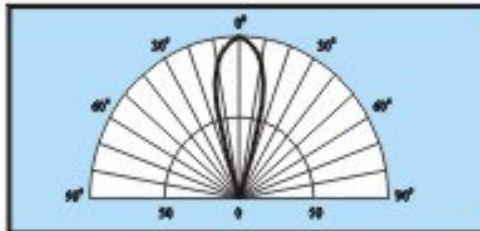
Mono-Color/ Φ 10 Round Series



Character

- Viewing angle 30 deg

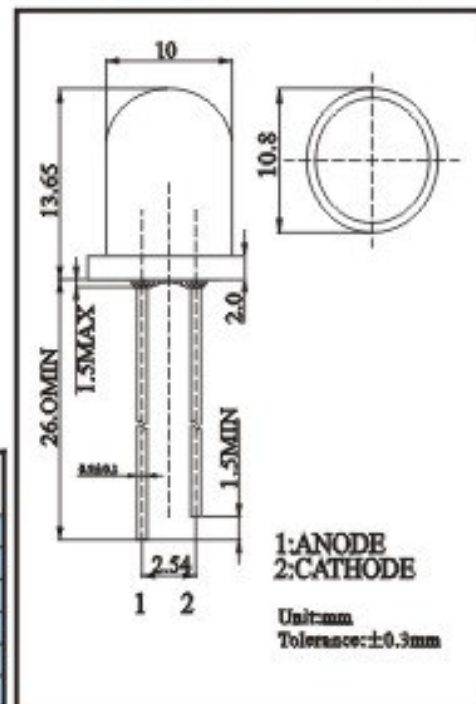
Directive Characteristics (Ta=25°C)



Relative Luminous Intensity

Package Outline

(Unit:mm)



Absolute Maximum Ratings (Ta=25°C)

Item	Symbol	Value		Unit
		PG/UB/SV	HR/OR/YL	
DC Forward Current	I_F	30	50	mA
Pulse Forward Current	I_{FP}	100 ^{*1}	120 ^{*1}	mA
Reverse Voltage	V_R	5	5	V
Power Dissipation	P_D	120	120	mW
Operating Temperature	T_{op}	-30~+85	-30~+85	°C
Storage Temperature	T_{stg}	-40~+100	-40~+100	°C

*1 Pulse width Max. 10ms Duty ratio max 1/10

Electrical and Optical Characteristics

Part Number ^{*2}	Emitting Color	Lens Type	Forward Voltage VF (V)		Chromaticity Coordinates ^{*4}				Luminous Intensity Iv (mcd) ^{*3}		Reverse Current IR (μA) at Vr=5V
			Typ.	Max.	x		y		Typ.	Max.	
					Min.	Max.	Min.	Max.			
Working Current: $I_F=20mA$											
OSPW0231A	White	Water Clear	3.3	3.8	0.22	0.32	0.34	0.34	15000	20000	<10
OSPE0231A	Pink	Water Clear	3.3	3.8	0.35	0.45	0.15	0.25	2500	3500	<10

Electrical and Optical Characteristics

Part Number ^{*2}	Emitting Color	Lens Type	Forward Voltage VF(V)		Dominant Wavelength λ_d (nm) ^{*3}		Luminous Intensity Iv (mcd) ^{*3}		Reverse Current IR (μA) at Vr=5V
			Typ.	Max.	Typ.	Max.	Typ.	Max.	
OSUB0231A	Blue	Water Clear	3.3	3.8	470	475	6000	8000	<10
OSPG0231A	Pure Green	Water Clear	3.3	3.8	525	535	14000	17000	<10
OSSF0231A	Violet	Water Clear	3.5	3.8	405	410	400	500	<10
OSYL0231A	Yellow	Water Clear	2.0	2.4	590	595	5000	7500	<10
OSOR0231A	Orange	Water Clear	2.0	2.4	605	610	5000	7500	<10
OSHR0231A	High Red	Water Clear	2.0	2.4	625	630	5000	7500	<10

- *2 See table for Luminous Intensity Ranks
- *3 Axial Direction (Luminous Intensity)
- *4 Please refer to CIE 1931 chromaticity diagram
- *5 Devices are sorted by 5nm wavelength ranges

Package

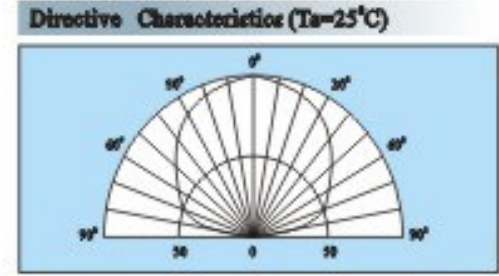
- Bulk..... 100pieces/bag (Code No.1)
- Bulk..... 200pieces/bag (Code No.2)
- Bulk..... 500pieces/bag (Code No.5)
- Bulk..... 1000pieces/bag (Code No.10)

Round

Φ5 Flat Series



Character
 ○ Viewing angle 140 deg



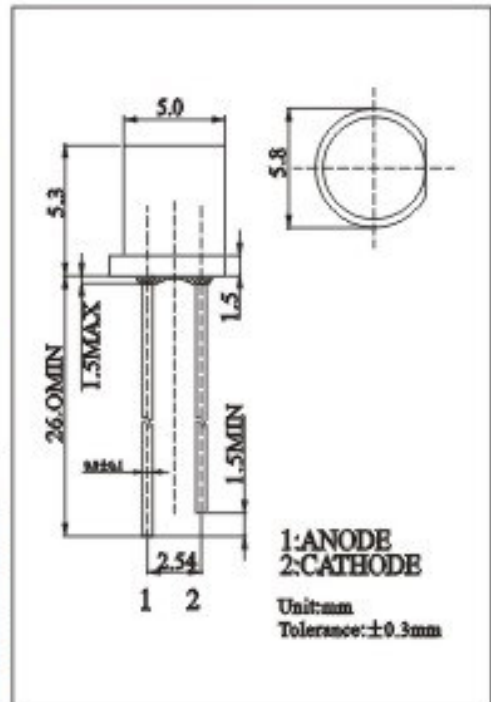
Relative Luminous Intensity

Absolute Maximum Ratings (Ta=25°C)

Item	Symbol	Value		Unit
		PG/UB/SV	HR/OR/YL	
DC Forward Current	IF	30	50	mA
Pulse Forward Current	IFP	100*1	120*1	mA
Reverse Voltage	VR	5	5	V
Power Dissipation	PD	120	120	mW
Operating Temperature	Topr	-30~+85	-30~+85	°C
Storage Temperature	Tstg	-40~+100	-40~+100	°C

*1 Pulse width Max.10ms Duty ratio max 1/10

Package Outlines (Unit:mm)



Electrical and Optical Characteristics

Part Number*2	Emitting Color	Lens Type	Forward Voltage VF (V)		Chromaticity Coordinates*4				Luminous Intensity Iv (mcd)*3		Reverse Current IR (μA) at Vr=5V
			Working Current:IF=20mA		x		y				
			Typ.	Max.	Min.	Max.	Min.	Max.	Typ.	Max.	
OSPW53B1A	White	Water Clear	3.3	3.3	0.22	0.32	0.24	0.34	600	800	<10
OSPK53B1A	Pink	Water Clear	3.3	3.3	0.35	0.45	0.15	0.25	300	500	<10

Electrical and Optical Characteristics

Part Number*2	Emitting Color	Lens Type	Forward Voltage VF(V)		Dominant Wavelength λd (nm)*5		Luminous Intensity Iv (mcd)*3		Reverse Current IR (μA) at Vr=5V
			Working Current:IF=20mA						
			Typ.	Max.	Typ.	Max.	Typ.	Max.	
OSUB53B1A	Blue	Water Clear	3.3	3.3	470	475	300	500	<10
OSPG53B1A	Pure Green	Water Clear	3.3	3.6	525	535	1000	1500	<10
OSBV53B1A	Violet	Water Clear	3.5	3.8	405	410	70	100	<10
OSYL53B1A	Yellow	Water Clear	2.0	2.4	590	595	600	900	<10
OSOR53B1A	Orange	Water Clear	2.0	2.4	605	610	600	900	<10
OSHR53B1A	High Red	Water Clear	2.0	2.4	625	630	600	900	<10

- *2 See table for Luminous Intensity Ranks
- *3 Axial Direction (Luminous Intensity)
- *4 Please refer to CIE 1931 chromaticity diagram
- *5 Devices are sorted by 5nm wavelength ranges
- *6 Other types please refer to photo

Package

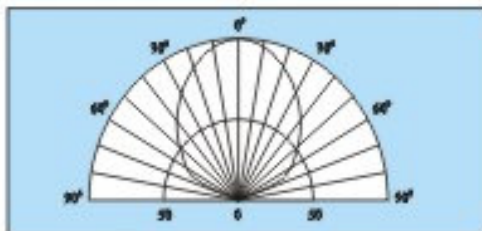
- Bulk..... 100pieces/bag (Code No.1)
- Bulk..... 200pieces/bag (Code No.2)
- Bulk..... 500pieces/bag (Code No.5)
- Bulk..... 1000pieces/bag (Code No.10)



Mono-Color/ Φ 4.8 Straw Series


Characters

- Viewing angle 100 deg

Directive Characteristics (Ta=25°C)


Relative Luminous Intensity

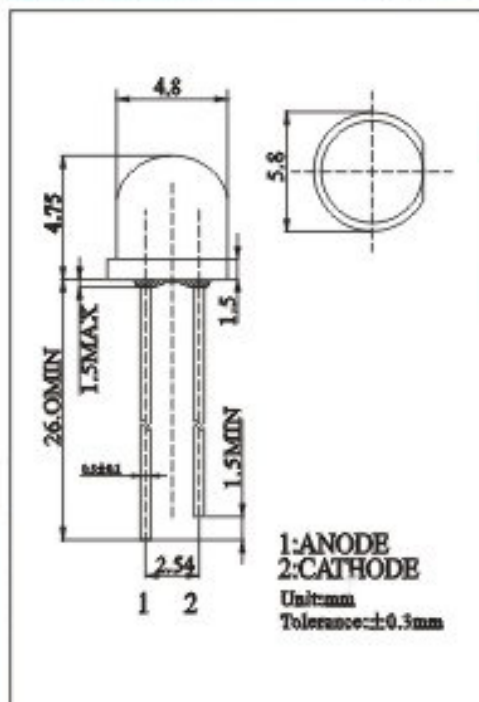
Absolute Maximum Ratings (Ta=25°C)

Item	Symbol	Value		Unit
		PG/UB/SV	HR/OR/YL	
DC Forward Current	IF	30	50	mA
Pulse Forward Current	IFP	100 ^{*1}	120 ^{*1}	mA
Reverse Voltage	VR	5	5	V
Power Dissipation	PD	120	120	mW
Operating Temperature	Tope	-30~+85	-30~+85	°C
Storage Temperature	Tstg	-40~+100	-40~+100	°C

*1 Pulse width Max. 10ms Duty ratio max 1/10

Package Outlines

(Unit:mm)



Round

Electrical and Optical Characteristics

Part Number ^{*2}	Emitting Color	Lens Type	Forward Voltage VF (V)		Chromaticity Coordinates ^{*4}				Luminous Intensity Iv (mcd) ^{*3}		Reverse Current IR (μA) at Vr=5V
			Typ.	Max.	x		y		Typ.	Max.	
					Min.	Max.	Min.	Max.			
Working Current:IF=20mA											
OSPW56A1A	White	Water Clear	3.3	3.8	0.22	0.32	0.24	0.34	800	1500	<10
OSPK56A1A	Pink	Water Clear	3.3	3.3	0.35	0.45	0.15	0.25	200	400	<10

Electrical and Optical Characteristics

Part Number ^{*2}	Emitting Color	Lens Type	Forward Voltage VF (V)		Dominant Wavelength λd (nm) ^{*5}		Luminous Intensity Iv (mcd) ^{*3}		Reverse Current IR (μA) at Vr=5V
			Typ.	Max.	Typ.	Max.	Typ.	Max.	
OSUB56A1A	Blue	Water Clear	3.3	3.8	470	475	300	500	<10
OSPG56A1A	Pure Green	Water Clear	3.3	3.8	525	535	800	1500	<10
OSBV56A1A	Violet	Water Clear	3.5	3.8	405	410	60	100	<10
OSYL56A1A	Yellow	Water Clear	2.0	2.4	590	595	500	800	<10
OSOR56A1A	Orange	Water Clear	2.0	2.4	605	610	500	800	<10
OSHR56A1A	High Red	Water Clear	2.0	2.4	625	630	500	800	<10

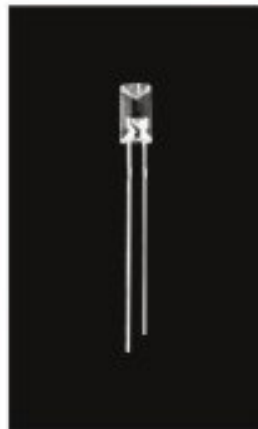
- *2 See table for Luminous Intensity Ranks
- *3 Axial Direction (Luminous Intensity)
- *4 Please refer to CIE 1931 chromaticity diagram
- *5 Devices are sorted by 5nm wavelength ranges

Package

- Bulk..... 100pieces/bag (Code No.1)
- Bulk..... 200pieces/bag (Code No.2)
- Bulk..... 500pieces/bag (Code No.5)
- Bulk..... 1000pieces/bag (Code No.10)

Φ5 Concave Series

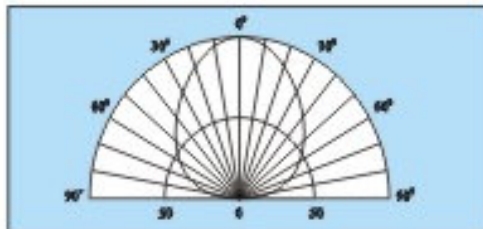
Round



Characters

- Viewing angle 120 deg

Directive Characteristics (T_a=25°C)



Relative Luminous Intensity

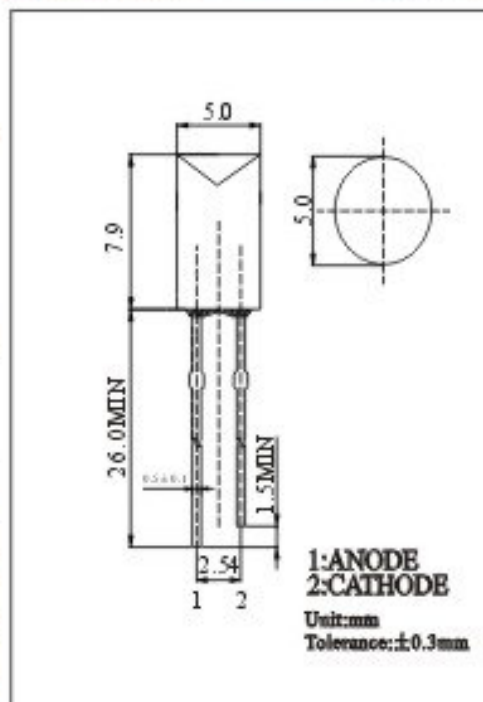
Absolute Maximum Ratings (T_a=25°C)

Item	Symbol	Value		Unit
		PG/UB/SV	HR/OR/YL	
DC Forward Current	I _F	30	50	mA
Pulse Forward Current	I _{FP}	100 ^{*1}	120 ^{*1}	mA
Reverse Voltage	V _R	5	5	V
Power Dissipation	P _D	120	120	mW
Operating Temperature	T _{opz}	-30~+85	-30~+85	°C
Storage Temperature	T _{stg}	-40~+100	-40~+100	°C

*1 Duty 1/10 Pulse Width 10 ms

Package Outlines

(Unit:mm)



Electrical and Optical Characteristics

Part Number ^{*2}	Emitting Color	Lens Type	Forward Voltage V _F (V)		Chromaticity Coordinates ^{*4}				Luminous Intensity I _v (mcd) ^{*5}		Reverse Current I _R (μA) at V _R =5V
			Working Current: I _F =20mA								
			Typ.	Max.	Min.	Max.	Min.	Max.	Typ.	Max.	
06PW3CIB	White	Water Clear	3.3	3.8	0.22	0.32	0.24	0.34	100	150	<10
06PK3CIB	Pink	Water Clear	3.3	3.8	0.35	0.45	0.15	0.25	20	40	<10

Electrical and Optical Characteristics

Part Number ^{*2}	Emitting Color	Lens Type	Forward Voltage V _F (V)		Dominant Wavelength λ _d (nm) ^{*3}		Luminous Intensity I _v (mcd) ^{*5}		Reverse Current I _R (μA) at V _R =5V
			Working Current: I _F =20mA						
			Typ.	Max.	Typ.	Max.	Typ.	Max.	
06UB3CIB	Blue	Water Clear	3.3	3.8	470	475	70	100	<10
06PG3CIB	Pure Green	Water Clear	3.3	3.8	525	535	150	200	<10
06V3CIB	Violet	Water Clear	3.5	3.8	405	410	10	20	<10
06YL3CIB	Yellow	Water Clear	2.0	2.4	590	595	70	100	<10
06OR3CIB	Orange	Water Clear	2.0	2.4	605	610	70	100	<10
06RR3CIB	High Red	Water Clear	2.0	2.4	625	630	70	100	<10

- *2 See table for Luminous Intensity Ranks
- *3 Axial Direction (Luminous Intensity)
- *4 Please refer to CIE 1931 chromaticity diagram
- *5 Devices are sorted by 5nm wavelength ranges

Package

- Bulk..... 100pieces/bag (Code No.1)
- Bulk..... 200pieces/bag (Code No.2)
- Bulk..... 500pieces/bag (Code No.5)
- Bulk..... 1000pieces/bag (Code No.10)

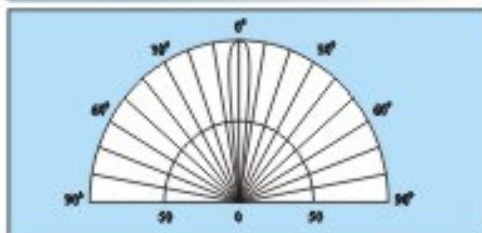
Φ5 Bullet Series



Characters

- Viewing angle 3 deg

Directive Characteristics (T_a=25°C)



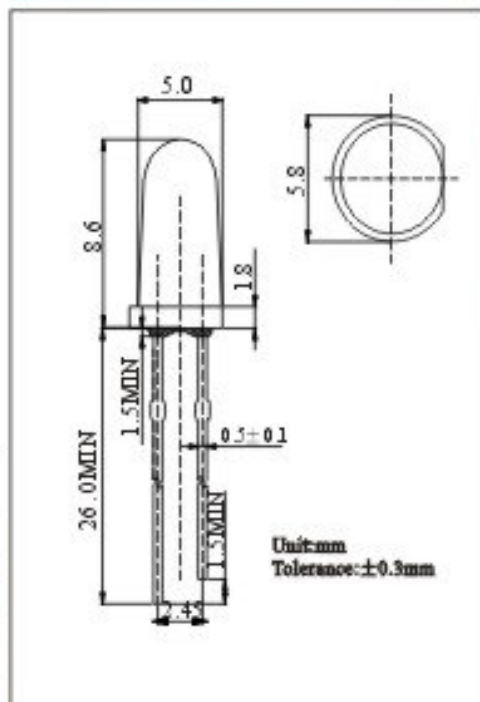
Relative Luminous Intensity

Absolute Maximum Ratings (T_a=25°C)

Item	Symbol	Value		Unit
		PG/UB/SV	HR/OR/YL	
DC Forward Current	I _F	30	50	mA
Pulse Forward Current	I _{FP}	100*1	150*1	mA
Reverse Voltage	V _R	5	5	V
Power Dissipation	P _D	120	120	mW
Operating Temperature	T _{opr}	-30~+85	-30~+85	°C
Storage Temperature	T _{stg}	-40~+100	-40~+100	°C

Package Outline

(Unit:mm)



Round

Electrical and Optical Characteristics

Part Number*2	Emitting Color	Lens Type	Forward Voltage V _F (V)		Chromaticity Coordinates*4				Luminous Intensity I _v (mcd)*3		Reverse Current I _R (μA) at V _R =5V
			Working Current: I _F =20mA		x		y				
			Typ.	Max.	Min.	Max.	Min.	Max.	Typ.	Max.	
OSPWS01A	White	Water Clear	3.3	3.8	0.22	0.32	0.24	0.34	14000	18000	<10
OSPES01A	Pink	Water Clear	3.3	3.3	0.35	0.45	0.15	0.25	3000	4200	<10

Electrical and Optical Characteristics

Part Number*2	Emitting Color	Lens Type	Forward Voltage V _F (V)		Dominant Wavelength λ _d (nm)*5		Luminous Intensity I _v (mcd)*3		Reverse Current I _R (μA) at V _R =5V
			Working Current: I _F =20mA						
			Typ.	Max.	Typ.	Max.	Typ.	Max.	
OSBWS01A	Blue	Water Clear	3.3	3.3	470	475	5800	7000	<10
OSPGS01A	Pure Green	Water Clear	3.3	3.3	525	535	12000	14000	<10
OSFVS01A	Violet	Water Clear	3.5	3.3	405	410	200	300	<10
OSYLS01A	Yellow	Water Clear	2.0	2.4	590	595	6000	9000	<10
OSORS01A	Orange	Water Clear	2.0	2.4	605	610	6000	9000	<10
OSERS01A	High Red	Water Clear	2.0	2.4	625	630	6000	9000	<10

- *2 See table for Luminous Intensity Ranks
- *3 Axial Direction (Luminous Intensity)
- *4 Please refer to CIE 1931 chromaticity diagram
- *5 Devices are sorted by 5nm wavelength ranges

Package

- Bulk..... 100pieces/bag (Code No.1)
- Bulk..... 200pieces/bag (Code No.2)
- Bulk..... 500pieces/bag (Code No.5)
- Bulk..... 1000pieces/bag (Code No.10)

Mono-Color/Φ10 Bullet Series

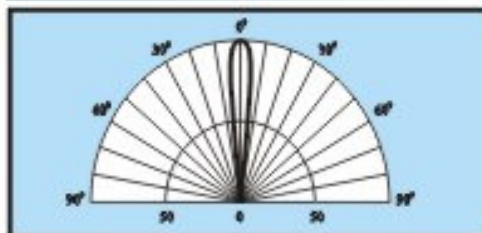
Round



Characters

- Viewing angle 3 deg

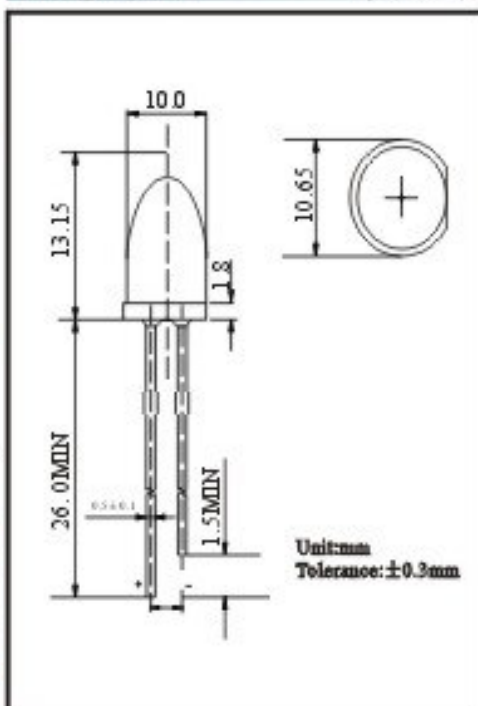
Directive Characteristics (T_a=25°C)



Relative Luminous Intensity

Package Outlines

(Unit:mm)



Absolute Maximum Ratings (T_a=25°C)

Item	Symbol	Value		Unit
		PG/UB/SV	HR/OR/YL	
DC Forward Current	I _F	30	50	mA
Pulse Forward Current	I _{FF}	100 ^{*1}	150 ^{*1}	mA
Reverse Voltage	V _R	5	5	V
Power Dissipation	P _D	120	120	mW
Operating Temperature	T _{opr}	-30~+85	-30~+85	°C
Storage Temperature	T _{stg}	-40~+100	-40~+100	°C

*1 Duty 1/10 Pulse Width 10 ms

Electrical and Optical Characteristics

Part Number ^{*2}	Emitting Color	Lens Type	Forward Voltage V _F (V)		Chromaticity Coordinates ^{*4}				Luminous Intensity I _v (mcd) ^{*3}		Reverse Current I _R (μA) at V _R =5V
			Typ.	Max.	x		y		Typ.	Max.	
					Min.	Max.	Min.	Max.			
Working Current:I _F =20mA											
OSPW211A	White	Water Clear	3.3	3.8	0.22	0.32	0.24	0.34	18000	22000	<10
OSPK211A	Pink	Water Clear	3.3	3.8	0.35	0.43	0.15	0.25	4200	5600	<10

Electrical and Optical Characteristics

Part Number ^{*2}	Emitting Color	Lens Type	Forward Voltage V _F (V)		Dominant Wavelength λ _d (nm) ^{*5}		Luminous Intensity I _v (mcd) ^{*3}		Reverse Current I _R (μA) at V _R =5V
			Typ.	Max.	Typ.	Max.	Typ.	Max.	
OSUB211A	Blue	Water Clear	3.3	3.8	470	475	7000	8400	<10
OSPG211A	Pure Green	Water Clear	3.3	3.8	525	535	14400	18000	<10
OSPV211A	Violet	Water Clear	3.5	3.8	405	410	300	420	<10
OSYL211A	Yellow	Water Clear	2.0	2.4	590	595	8400	10000	<10
OSOR211A	Orange	Water Clear	2.0	2.4	605	610	8400	10000	<10
OSBR211A	High Red	Water Clear	2.0	2.4	625	630	8400	10000	<10

- *2 See table for Luminous Intensity Ranks
- *3 Axial Direction (Luminous Intensity)
- *4 Please refer to CIE 1931 chromaticity diagram
- *5 Devices are sorted by 5nm wavelength ranges

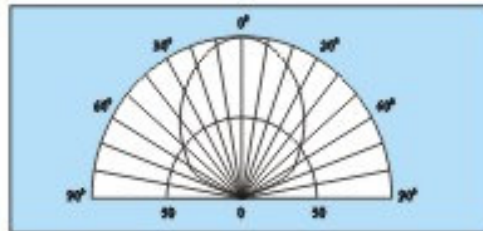
Package

- Bulk..... 100pieces/bag (Code No.1)
- Bulk..... 200pieces/bag (Code No.2)
- Bulk..... 500pieces/bag (Code No.5)
- Bulk..... 1000pieces/bag (Code No.10)

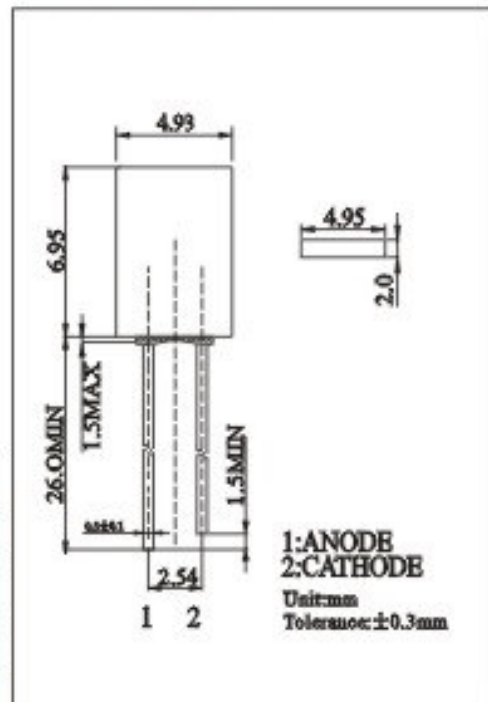
Mono-Color/2×5×7mm Series


Character

- Viewing angle 100 deg

Directive Characteristics (Ta=25°C)

Relative Luminous Intensity
Package Outlines

(Unit:mm)


Absolute Maximum Ratings (Ta=25°C)

Item	Symbol	Value		Unit
		PG/UB/SV	HR/OR/YL	
DC Forward Current	IF	30	50	mA
Pulse Forward Current	IFP	100 ^{*1}	120 ^{*1}	mA
Reverse Voltage	VR	5	5	V
Power Dissipation	PD	120	120	mW
Operating Temperature	Topr	-30~+85	-30~+85	°C
Storage Temperature	Tstg	-40~+100	-40~+100	°C

*1 Pulse width Max. 10ms Duty ratio max 1/10

Electrical and Optical Characteristics

Part Number ^{*2}	Emitting Color	Lens Type	Forward Voltage VF (V)		Chromaticity Coordinates ^{*4}				Luminous Intensity Iv (mcd) ^{*3}		Reverse Current IR (μA) at Vr=5V
			Typ.	Max.	x		y		Typ.	Max.	
					Min.	Max.	Min.	Max.			
Working Current: IF=20mA											
OSPW72A1B	White	Water Clear	3.3	3.8	0.22	0.32	0.24	0.34	700	1000	<10
OSPK72A1B	Pink	Water Clear	3.3	3.8	0.35	0.45	0.15	0.25	300	500	<10

Electrical and Optical Characteristics

Part Number ^{*2}	Emitting Color	Lens Type	Forward Voltage VF (V)		Dominant Wavelength λd (nm) ^{*5}		Luminous Intensity Iv (mcd) ^{*3}		Reverse Current IR (μA) at Vr=5V
			Typ.	Max.	Typ.	Max.	Typ.	Max.	
OSUB72A1B	Blue	Water Clear	3.3	3.8	470	475	350	600	<10
OSPG72A1B	Pure Green	Water Clear	3.3	3.8	525	535	900	1400	<10
OSV72A1B	Violet	Water Clear	3.5	3.8	405	410	66	100	<10
OSYL72A1B	Yellow	Water Clear	2.0	2.4	590	595	600	900	<10
OSOR72A1B	Orange	Water Clear	2.0	2.4	605	610	600	900	<10
OSHR72A1B	High Red	Water Clear	2.0	2.4	625	630	600	900	<10

*2 See table for Luminous Intensity Ranks

*3 Axial Direction (Luminous Intensity)

*4 Please refer to CIE 1931 chromaticity diagram

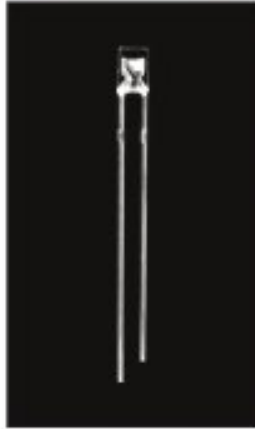
*5 Devices are sorted by 5nm wavelength ranges

Package

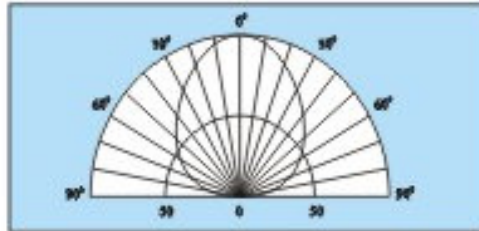
- Bulk..... 100pieces/bag (Code No.1)
- Bulk..... 200pieces/bag (Code No.2)
- Bulk..... 500pieces/bag (Code No.5)
- Bulk..... 1000pieces/bag (Code No.10)

Rectangular

Mono-Color/2×3×4mm Series


Characters

- Viewing angle 120 deg

Directive Characteristics (T_a=25°C)


Relative Luminous Intensity

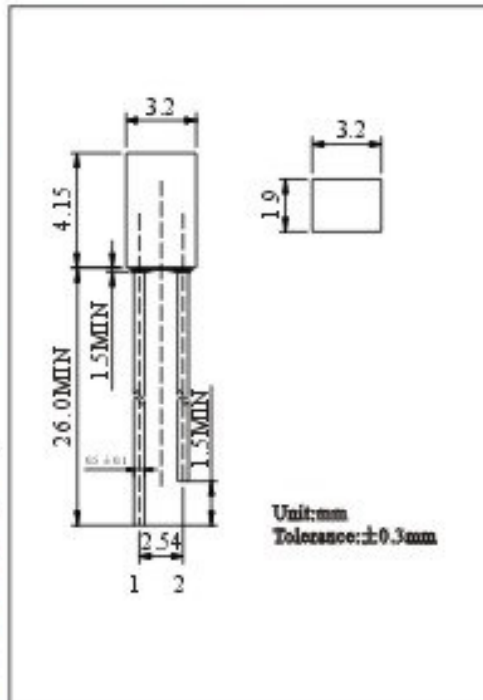
Absolute Maximum Ratings (T_a=25°C)

Item	Symbol	Value		Unit
		PG/UB/SV	HR/OR/YL	
DC Forward Current	I _F	30	50	mA
Pulse Forward Current	I _{FP}	100*1	120*1	mA
Reverse Voltage	V _R	5	5	V
Power Dissipation	P _D	120	120	mW
Operating Temperature	T _{opr}	-30~+85	-30~+85	°C
Storage Temperature	T _{stg}	-40~+100	-40~+100	°C

*1 Duty 1/10 Pulse Width 10 ms

Package Outlines

(Unit:mm)


Electrical and Optical Characteristics

Part Number*2	Emitting Color	Lens Type	Forward Voltage V _F (V)		Chromaticity Coordinates*4				Luminous Intensity I _v (mcd)*3		Reverse Current I _R (μA) at V _R =5V
					x	y					
			Typ.	Max.	Min.	Max.	Min.	Max.	Typ.	Max.	
Working Current: I _F =20mA											
06PW4B1B	White	Water Clear	3.3	3.8	0.22	0.32	0.24	0.34	500	750	<10
06PK4B1B	Pink	Water Clear	3.3	3.8	0.35	0.45	0.15	0.25	200	300	<10

Electrical and Optical Characteristics

Part Number*2	Emitting Color	Lens Type	Forward Voltage V _F (V)		Dominant Wavelength λ _d (nm)*5		Luminous Intensity I _v (mcd)*3		Reverse Current I _R (μA) at V _R =5V
					Typ.	Max.	Typ.	Max.	
			Typ.	Max.	Typ.	Max.	Typ.	Max.	
Working Current: I _F =20mA									
06UB4B1B	Blue	Water Clear	3.3	3.8	470	475	300	400	<10
06PG4B1B	Pure Green	Water Clear	3.3	3.8	525	535	600	1000	<10
06VY4B1B	Violet	Water Clear	3.5	3.8	405	410	60	80	<10
06YL4B1B	Yellow	Water Clear	2.0	2.4	590	595	500	700	<10
06OR4B1B	Orange	Water Clear	2.0	2.4	605	610	500	700	<10
06RR4B1B	High Red	Water Clear	2.0	2.4	625	630	500	700	<10

*2 See table for Luminous Intensity Ranks

*3 Axial Direction (Luminous Intensity)

*4 Please refer to CIE 1931 chromaticity diagram

*5 Devices are sorted by 5nm wavelength ranges

Package

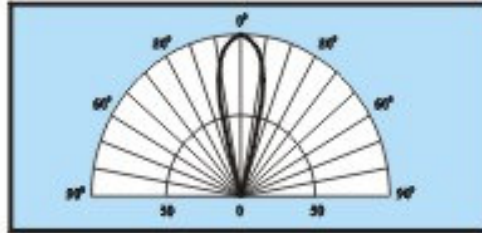
Bulk.....	100pieces/bag	(Code No.1)
Bulk.....	200pieces/bag	(Code No.2)
Bulk.....	500pieces/bag	(Code No.5)
Bulk.....	1000pieces/bag	(Code No.10)

Screw Based LED Series


Character

● AC or DC Driver

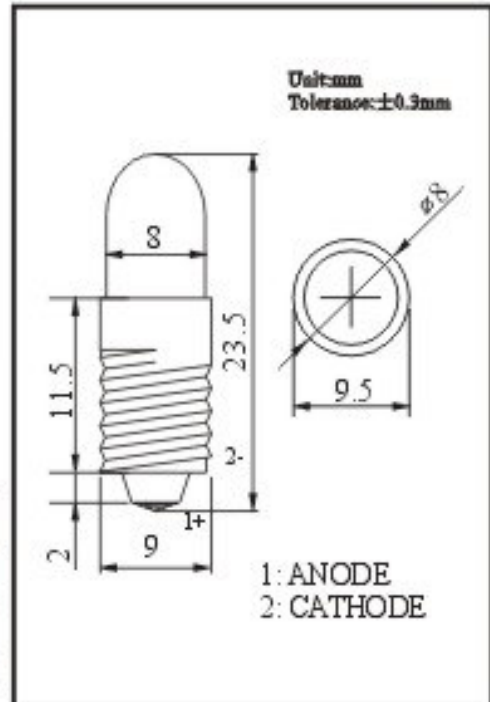
Viewing angle 30 deg



Relative Luminous Intensity

Package Outlines

(Unit:mm)


Absolute Maximum Ratings (Ta=25°C)

Item	Symbol	Value	Unit
DC Forward Current	I_F	20	mA
Pulse Forward Current	I_{FP}	100 ^{*1}	mA
Operating Temperature	T_{op}	-30~+85	°C
Storage Temperature	T_{stg}	-40~+100	°C

*1 Pulse width Max.10ms Duty ratio max 1/10

Electrical and Optical Characteristics (Ta=25°C)

Part Number ^{*2}	Emitting Color	Lens Type	Forward Voltage VF (V)		Chromaticity Coordinates ^{*4}				Luminous Intensity Iv (mcd) ^{*3}		Reverse Current IR (μA)
			AC	DC	x		y		Typ.	Max.	
					Min.	Max.	Min.	Max.			
Working Current:IF=20mA											
ORXXPW131B	White	Water Clear	4-24	4-24	0.26	0.29	0.25	0.28	10000	12000	<10
ORXXPE131B	Pink	Water Clear	4-24	4-24	0.34	0.15	0.15	0.25	1700	2500	<10

Electrical and Optical Characteristics (Ta=25°C)

Part Number ^{*2}	Emitting Color	Lens Type	Forward Voltage VF(V)		Dominant Wavelength λd (nm) ^{*5}		Luminous Intensity Iv (mcd) ^{*3}		Reverse Current IR (μA)
			AC	DC	Typ.	Max.	Typ.	Max.	
ORXXUB131B	Blue	Water Clear	4-24	4-24	470	475	4000	5000	<10
ORXXPG131B	Pure Green	Water Clear	4-24	4-24	525	535	10000	12000	<10
ORXXFY131B	Yellow	Water Clear	3-24	3-24	590	595	8000	10000	<10
ORXXOR131B	Orange	Water Clear	3-24	3-24	605	610	8000	10000	<10
ORXXRD131B	Red	Water Clear	3-24	3-24	625	630	8000	10000	<10

*2 See table for Luminous Intensity Ranks

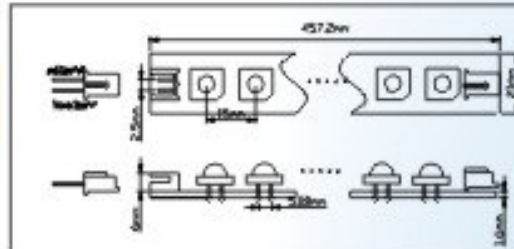
*3 Axial Direction (Luminous Intensity)

*4 Please refer to CIE 1931 chromaticity diagram

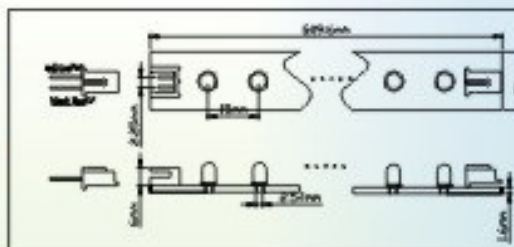
*5 Devices are sorted by 5nm wavelength ranges

Package

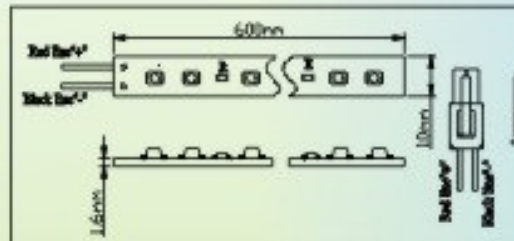
Bulk..... 100pieces/bag (Code No.1)
 Bulk..... 200pieces/bag (Code No.2)
 Bulk..... 500pieces/bag (Code No.5)

Model: OSPM-X4627BSS

Super Flux LED PCB

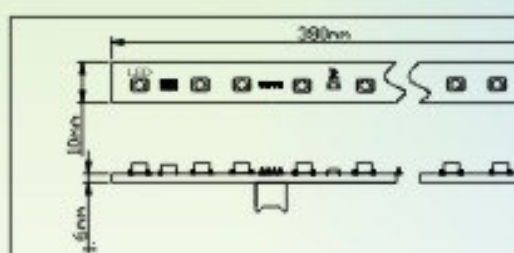
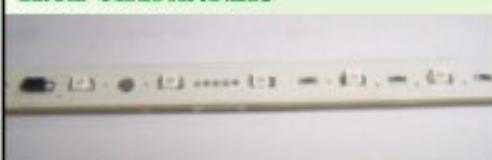
- 1) Available in full range of colors.
- 2) Low input voltage DC 12V.
- 3) Multi choice for viewing angles from 60-120 degrees.
- 4) Available in 27 and 37 led version for each PCB, the type of connection terminal is PH-2.5.
- 5) Suitable for backlighting of signs, channel letters and interior decoration.

Model: OSPM-X6137BSS

5mm Round LED PCB

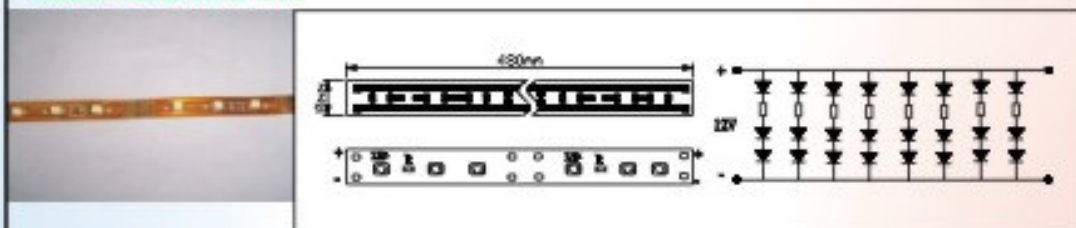
- 1) Available in full range of colors.
- 2) Low input voltage DC 12V.
- 3) Multi choice for viewing angles from 8-140 degrees.
- 4) Available in 27 and 37 led version for each PCB, the type of connection terminal is PH-2.5.
- 5) Suitable for backlighting of signs, channel letters and interior decoration.

Model: OSPM-X6032ETS

SMD LED PCB

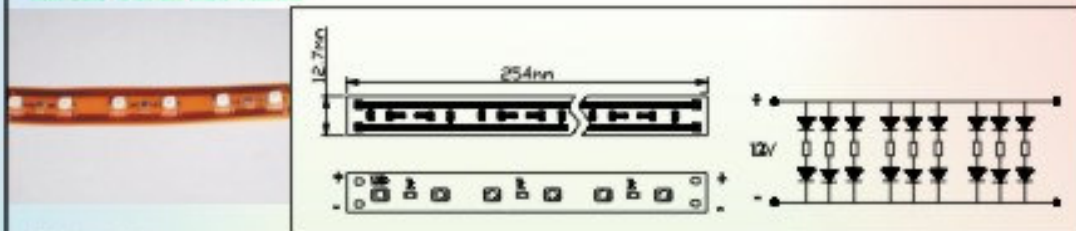
- 1) Available in full range of colors
- 2) Low input voltage DC 12V.
- 3) Harmonious Light with wide viewing angle 120 degree.
- 4) Available in 24 led version for each PCB, the type of connection terminal 99-01-0040 is supplied by Midea.
- 5) Suitable for backlighting of signs, channel letters and interior decoration

Model: OSPM-X3820ETS

SMD LED PCB

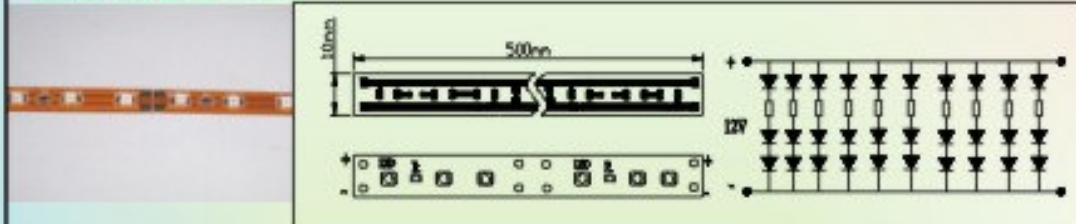
- 1) Available in full range of colors
- 2) Low input voltage DC 12V.
- 3) Harmonious Light with wide viewing angle 120 degree.
- 4) Available in 20 led version for each PCB, the type of connection terminal B05B-PASE is supplied by IST.
- 5) Suitable for backlighting of signs, channel letters and interior decoration

Model: OSPM-X4824ETS

SMD Strip LED

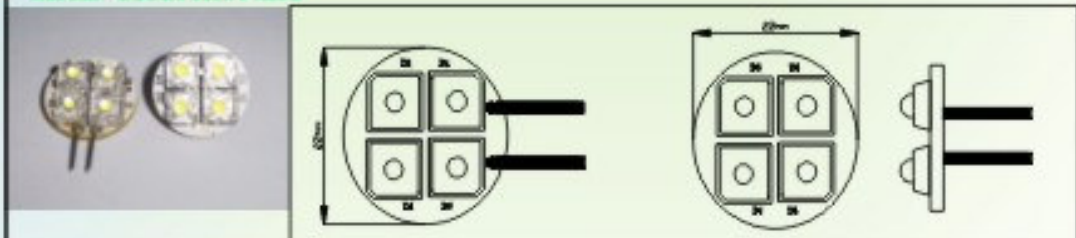
- 1) Linear separable LED strip on flexible printed circuit board .
- 2) Each unit of 3 leds can be cut out at regular segments without damaging the rest ribbon
- 3) View angle is 120 degrees and voltage is DC 12V.
- 4) Used for path and contour marking, illuminated signs, etc.

Model: OSPM-X2518ETS

SMD Strip LED

- 1) Linear separable LED strip on flexible printed circuit board .
- 2) Each unit of 6 leds can be cut out at regular segments without damaging the rest ribbon
- 3) View angle is 120 degrees and voltage is DC 12V.
- 4) Used for path and contour marking, illuminated signs, etc.

Model: OSPM-X5030ETS

SMD Strip LED

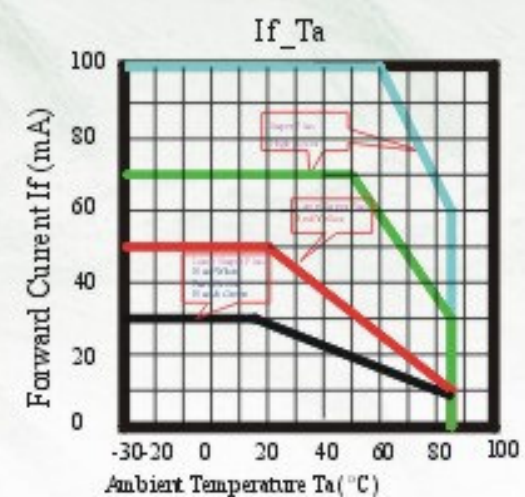
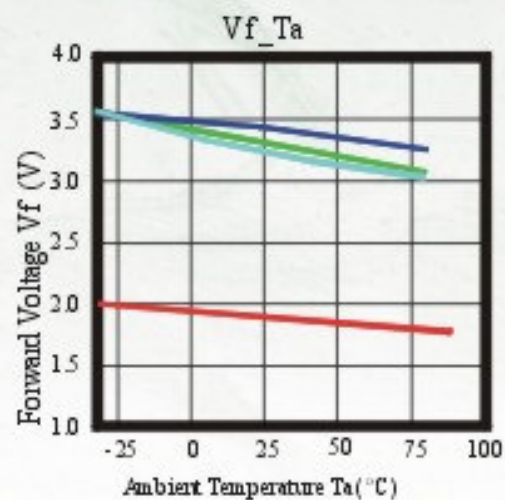
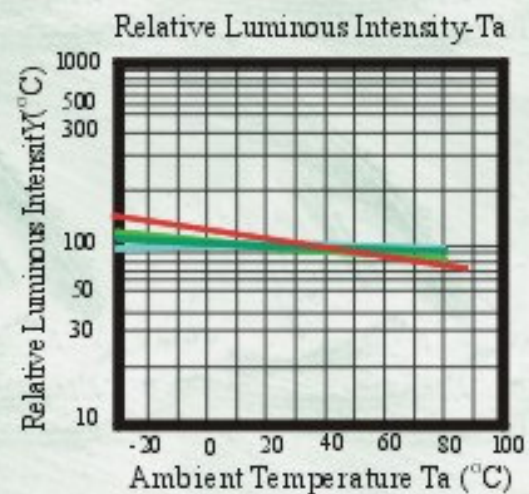
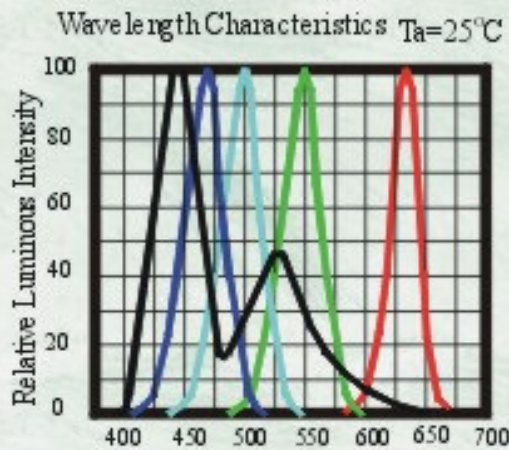
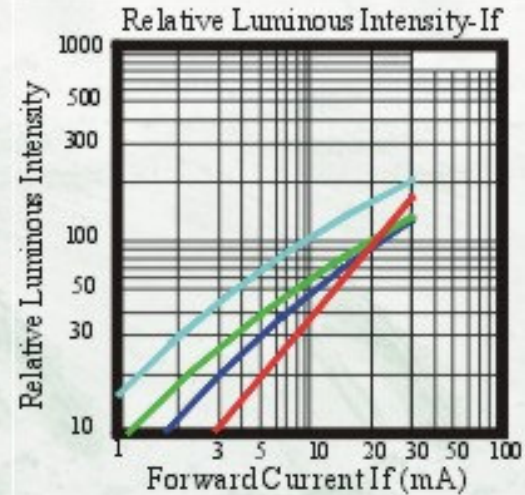
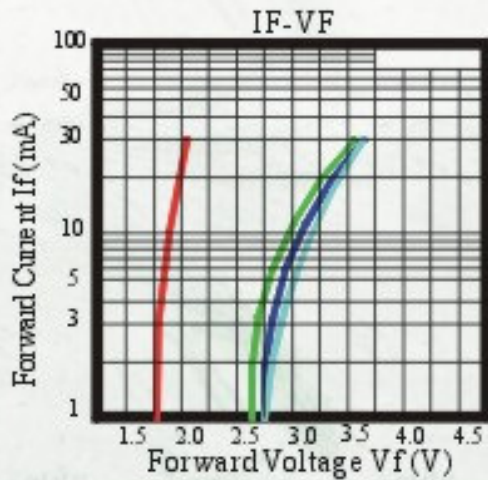
- 1) Linear separable LED strip on flexible printed circuit board .
- 2) Each unit of 3 leds can be cut out at regular segments without damaging the rest ribbon
- 3) View angle is 120 degrees and voltage is DC 12V.
- 4) Used for path and contour marking, illuminated signs, etc.

Model: OSPM-X0204ESS

Super Flux LED PCB

- 1) Available in 4-LED.
- 2) Full range of colour:red, yellow, blue, green, white, etc.
- 3) Voltage is AC/DC 12V, the type of connection terminal is JCG4 .
- 4) Used for path and contour marking, illuminated signs, etc.

Typical Characteristics

*The data shows typical value.





LED Lamp Production



LED Lamp Assembly



LED Bin Sorter



RoHS



- ★ Modifications in the shape and specifications of the Product may be made without prior notice.
- ★ The actual color of the Products may differ from those printed in this brochure.
- ★ For details on the Products described here, kindly contact Optosupply Sales Division.

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