

SMD Switching Diode

Primary characteristics			
Parameter	Symbol	Value	Unit
Reverse voltage	V_R	250	V
Forward Current	I_F	200	mA
Power Dissipation	P_D	200	mW

Features

- **SOT-23** case for easy automatic insertion.
- Pb-free and **RoHS** compliant
- Fast switching speed
- High conductance
- For general purpose switching applications

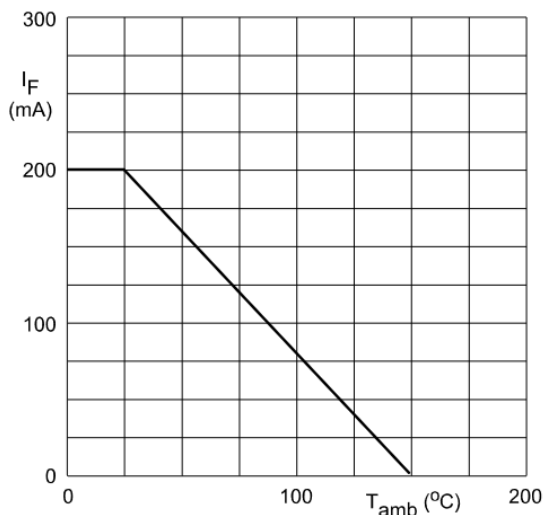
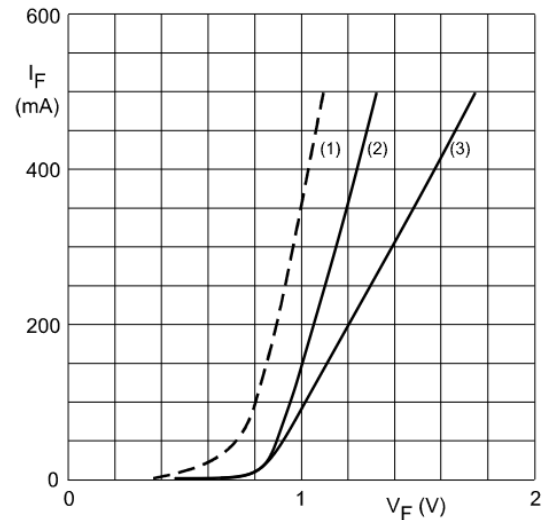
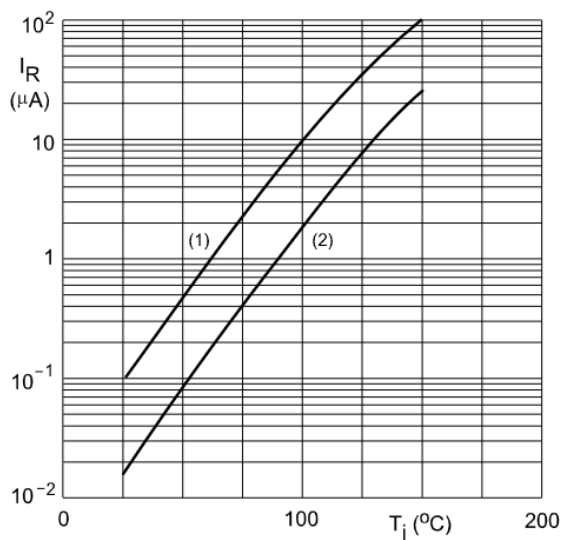
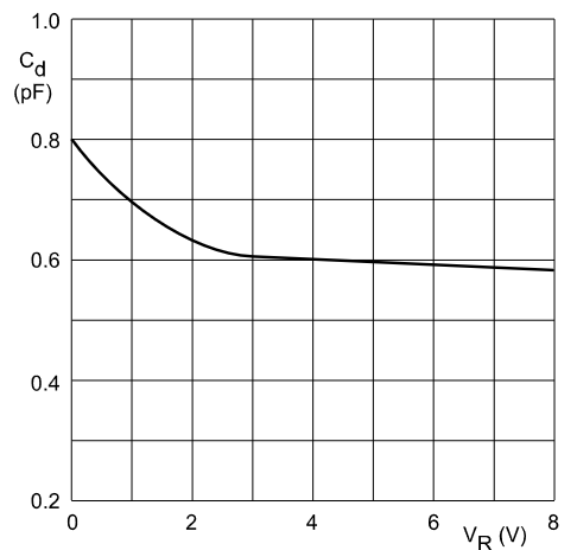
Case dimensions	
SOT-23 (TO-236AB)	
Unit	A A₁max b_p c D E e e₁ H_E L_p Q v w
mm	1.0 ±0.1 0.1 ±0.05 ±0.03 ±0.1 1.3 ±0.1 1.9 0.95 ±0.2 ±0.15 ±0.05 0.2 0.1

Part numbers and pin configuration				
	BAS21	BAS21A	BAS21C	BAS21S
Marking	JS	JS2	JS3	JS4
1 – Base 2 – Emitter 3 – Collector				

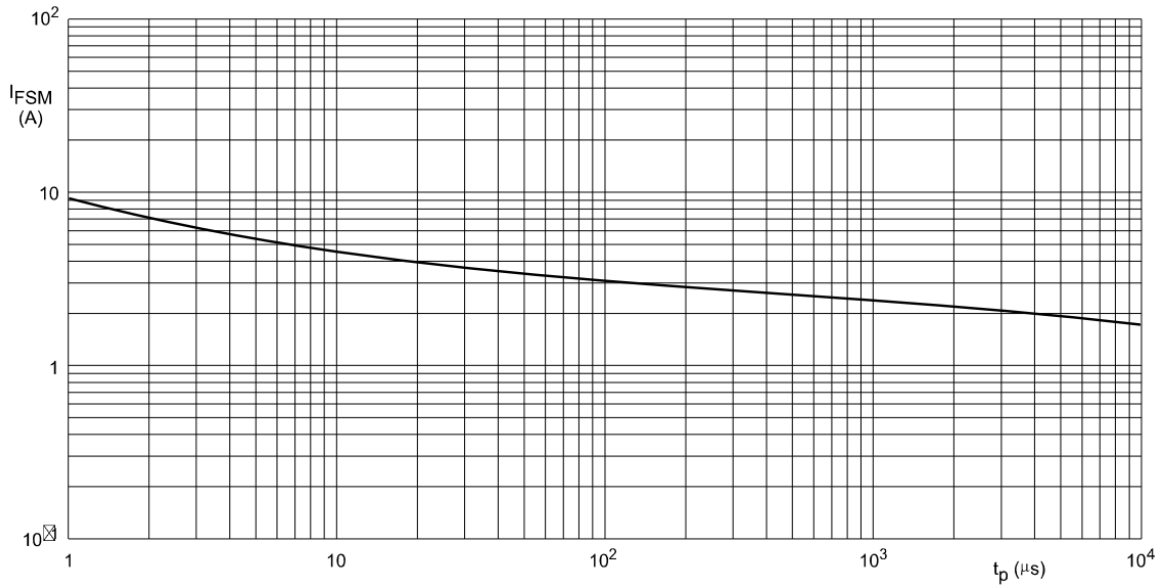
Maximum ratings and electrical characteristics ($T_a = 25^\circ\text{C}$)			
Characteristics	Symbol	Value	Unit
Reverse voltage	V_R	250	V
Forward current	I_F	200	mA
Power dissipation	P_D	200	mW
Operating junction and storage temperature range	T_j, T_{STG}	-55 ~ 150	$^\circ\text{C}$

Electrical characteristics (T_a=25°C)

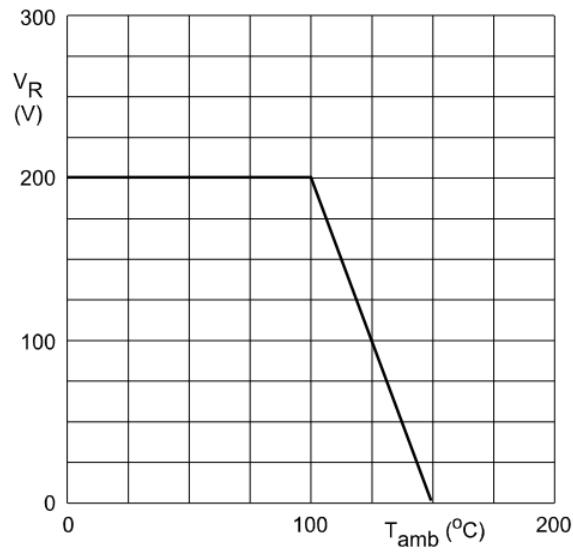
Parameter	Symbol	Test conditions	Value			Unit
			Min.	Typ.	Max.	
Reverse breakdown voltage	V _(BR)	I _R =100μA	250	-	-	V
Reverse leakage current	I _R	V _R =200V	-	-	100	nA
Forward voltage	V _F	I _F = 100mA	-	-	1.0	V
		I _F = 200mA	-	-	1.25	
Junction capacitance	C _j	V _R =0V, f=1.0MHz	-	-	5.0	pF
Reverse recovery time	t _{rr}		-	-	50	ns

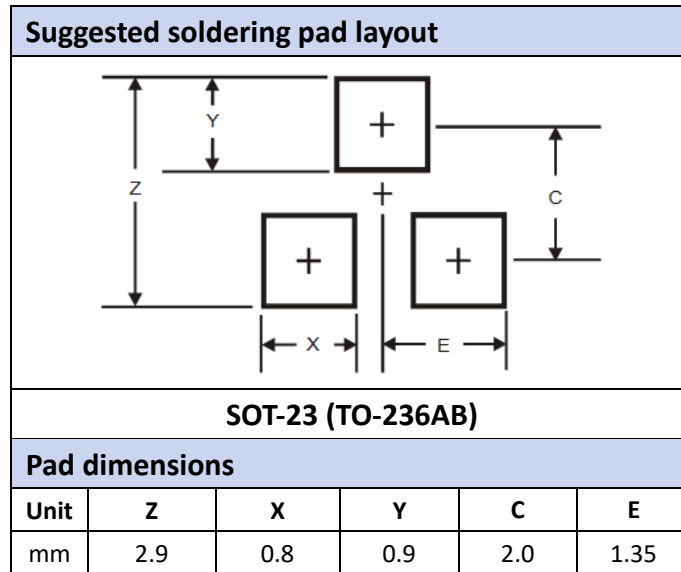
Maximum permissible continuous forward current vs ambient temperature

Forward current vs forward voltage

Reverse current vs junction temperature

Diode capacitance vs reverse voltage; typ.


Maximum permissible non-repetitive peak forward current as a function of pulse duration



Maximum permissible continuous reverse voltage vs ambient temperature





Ordering information			
Part Number	Package	Shipping Quantity	Dimensions
BAS21/A/C/S	SOT-23	3000 pcs / 7" reel	---

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