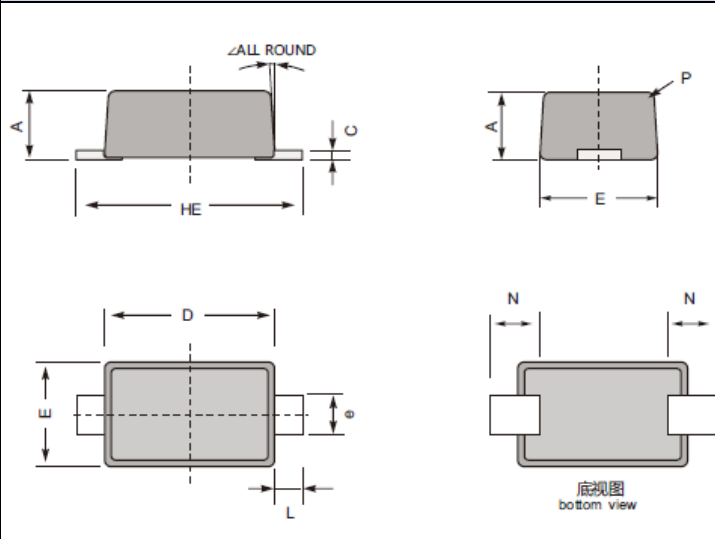


Transient Voltage Suppressors for ESD Protection

Primary characteristics			
Parameter	Symbol	Value	Unit
Working reverse voltage	V_{RWM}	5.0	V
ESD per IEC 61000-4-2 (contact)	V_{ESD}	± 20	kV
ESD per IEC 61000-4-2 (air)	V_{ESD}	± 20	kV
Peak pulse current	I_{pp}	4	A

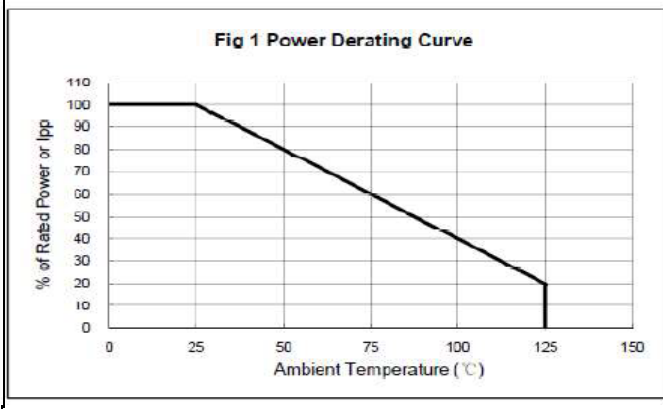
Features

- **SOD-523** case for easy automatic insertion.
- Pb-free and **RoHS** compliant
- IEC61000-4-2 level 4 ESD protection
- Low leakage current
- Low clamping voltage
- Ultra low capacitance 0,7pF

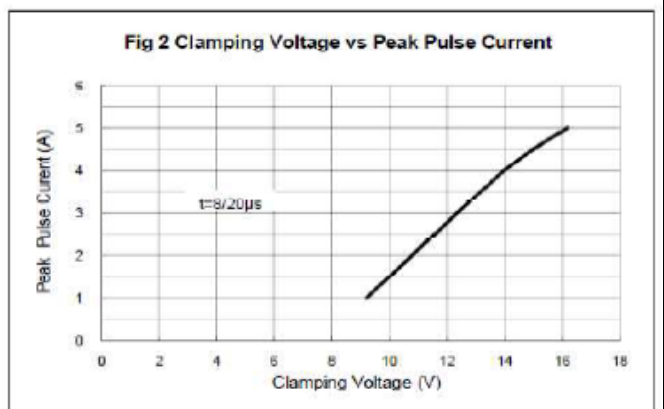
Case dimensions										
										
SOD-523										
Unit	A	e	C	D	E	HE	N	L	P	α
mm	0.51 0.77	0.25 0.35	0.08 0.15	1.10 1.30	0.75 0.99	1.50 1.70	0.35 REF	0.20 REF	RO.1	9° 11°

Maximum ratings and electrical characteristics ($T_a = 25^\circ\text{C}$)						
Characteristics	Test condition	Symbol	Value			Unit
			Min.	Typ.	Max.	
ESD per IEC 61000-4-2 (contact)	-	V_{ESD}	-20	-	+20	kV
ESD per IEC 61000-4-2 (air)						
Peak pulse power (8/20 μs)	-	P_{pk}	-	10	-	W
Peak Pulse Current	-	I_{pp}	-	4	-	A
Operating, storage temperature	-	T_j, T_{stg}	-55	-	150	$^\circ\text{C}$
Reverse working voltage	-	V_{RWM}	-	-	5.0	V
Reverse breakdown voltage	$I_T=1\text{mA}$	V_{BR}	6.0	-	-	V
Reverse leakage current	$V=V_{RWM}, T_a=25^\circ\text{C}$	I_R	-	-	100	μA
Clamping voltage	$I_{pp}=1\text{A}, t_p=8/20\mu\text{s}$	V_C	-	-	10	V
Junction capacitance	-	C_J	-	-	0.7	pF

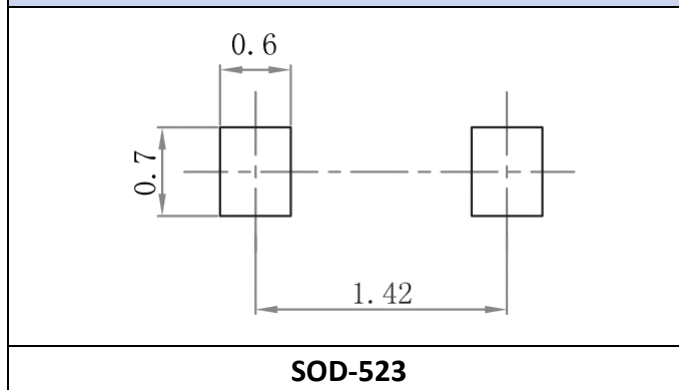
Power Derating Curve



Clamping Voltage vs Peak Pulse Current



Suggested soldering pad layout



Ordering information

Part Number / Marking code	Package	Shipping Quantity
ESD5Z5.0L	SOD-523	3 000 pcs / 7" reel

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