

Features

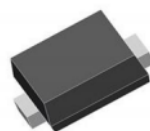
- 80Watts peak pulse power ($t_p = 8/20\mu s$)
- Bidirectional configurations
- Solid-state silicon-avalanche technology
- Low clamping voltage
- Low leakage current
- IEC 61000-4-2 $\pm 25kV$ contact $\pm 25kV$ air
- IEC 61000-4-4 (EFT) 40A (5/50ns)
- IEC 61000-4-5 (Lightning) 8A (8/20 μs)

Applications

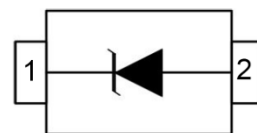
- Microprocessor based equipment
- Personal Digital Assistants (PDA's)
- Notebooks, Desktops, and Servers
- Portable Instrumentation
- Pagers Peripherals

Mechanical Data

- SOD523 package
- Molding compound flammability rating: UL 94V-0
- Packaging: Tape and Reel
- RoHS/WEEE Compliant



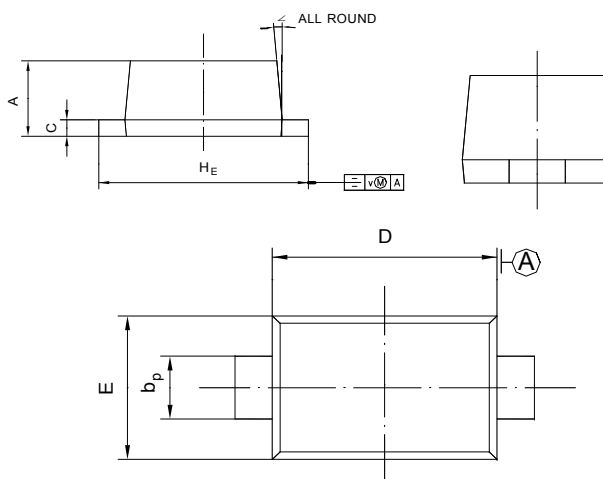
SOD523



SOD-523

Schematic & PIN Configuration

SOD-523



UNIT	A	b _p	C	D	E	H _E	V	∠
mm	0.70 0.50	0.40 0.20	0.14 0.05	1.30 1.10	0.90 0.75	1.70 1.50	0.1	5°

Dimensions in inches and (millimeters)

Maximum Rating @ Ta=25°C unless otherwise specified

Symbol	Parameter	Ratings	Units
P _{PK}	Peak Pulse Power ($t_p = 8/20\mu s$)	150	Watts
T _L	Lead Soldering Temperature	260(10sec)	°C
T _J	Operating Temperature	-55 to +125	°C
T _{STG}	Storage Temperature	-55 to +150	°C

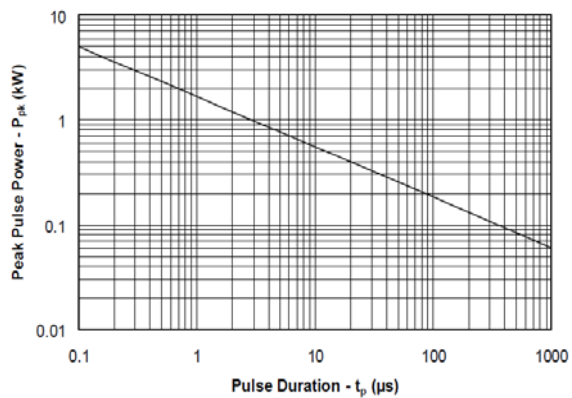
ESD5Z7.0T1G THRU ESD5Z36T1G

Electrical Characteristics

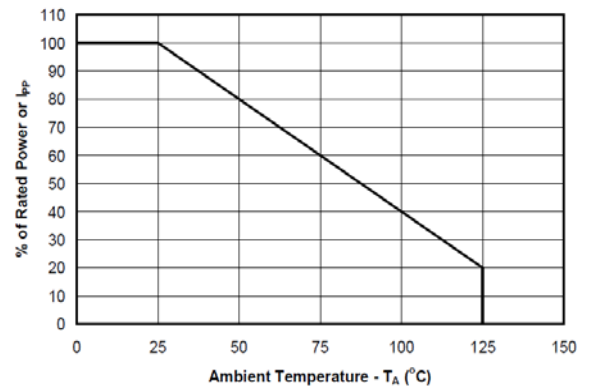
Parameter	Marking	VRWM @IR		VBR@ImA	VC@1A	VC@IPP		CJ
		V	μ A	V	V	V	A	pF
			MAX	MIN	MAX	MAX		MAX
ESD5Z3.3T1G		3	1	4.8	8.8	14.5	12	120
ESD5Z5.0T1G		5	1	6.2	9.8	15.6	10	100
ESD5Z7.0T1G		7	1	8.2	13	19.6	8	80
ESD5Z12T1G		12	1	13.3	19	32.8	6	60
ESD5Z15T1G		15	1	16.7	24	36.5	5	50
ESD5Z24T1G		24	1	26.7	43	56.8	3	30
ESD5Z36T1G		36	1	38.6	55	78.5	3	25

RATING AND CHARACTERISTIC CURVES

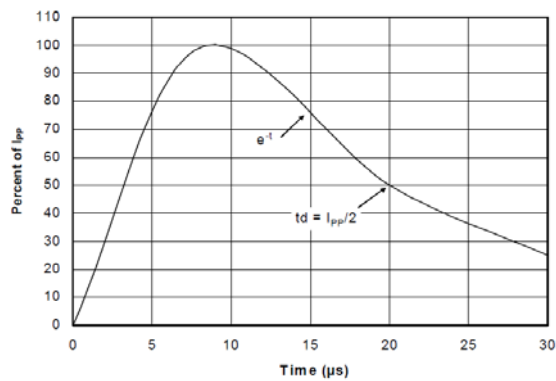
Non-Repetitive Peak Pulse Power vs. Pulse Time



Power Derating Curve



Pulse Waveform



$I_R[T_J] / I_R[T_J=25^{\circ}C]$

