

Features

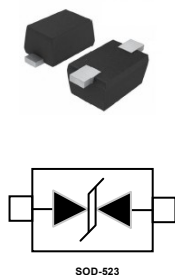
80Watts peak pulse power($t_p=8/20\mu s$)
 Bi-directional configurations
 Solid-state silicon-avalanche technology
 Low leakage current
 Low clamping voltage
 IEC 61000-4-2(ESD) $\pm 30kV$ contact $\pm 30kV$ air
 IEC61000-4-4(EFT) 40A (5/50ns)
 IEC 61000-4-5(Lightning) 8A (8/20 μs)

Applications

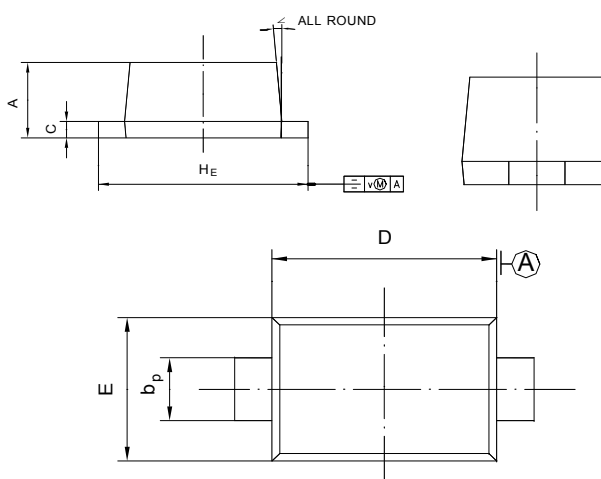
Microprocessor based equipment
 Personal Digital Assestants(PDA's)
 Notebooks, Desktops, and Servers
 Pagere Peripherals

Mechanical Data

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



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)

Absolute Maximum Rating

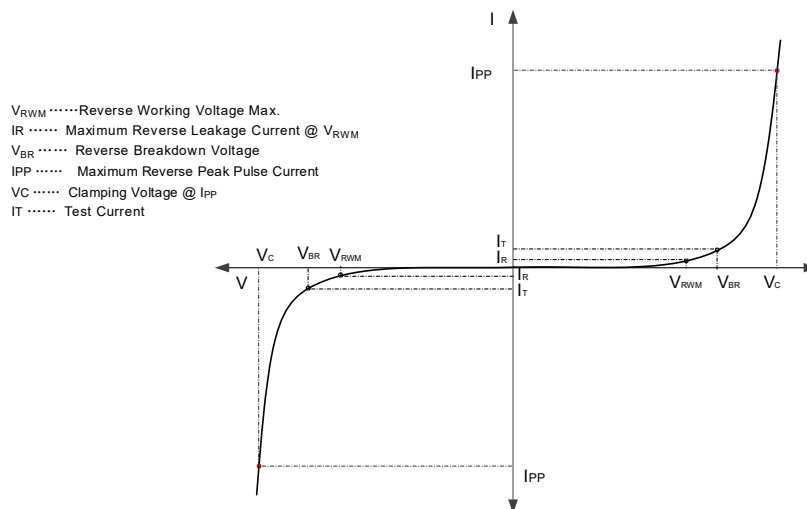
Rating	Symbol	Value	Units
Peak Pulse Power ($t_p=8/20\mu s$)	P _{PP}	80	Watts
Peak Pulse Current ($t_p=8/20\mu s$) (Note1)	I _{pp}	8	A
ESD per IEC 61000-4-2 (Air) ESD per IEC 61000-4-2 (Contact)	V _{ESD}	30 30	kV
Lead Soldering Temperature	T _L	260(10seconds)	°C
Junction Temperature	T _J	-55 to + 150	°C
Storage Temperature	T _{stg}	-55 to + 150	°C

ESD5Z3.3C

Electrical Characteristics

Parameter	Symbol	Conditions	Min	Typical	Max	Units
Reverse Stand-Off Voltage	V_{RWM}				3.3	V
Reverse Breakdown Voltage	V_{BR}	$I_T=1mA$	3.6			
Reverse Leakage Current	I_R	$V_{RWM}=3.3V, T=25^{\circ}C$			0.5	μA
Clamping Voltage	V_C	$I_{PP}=8A, t_p=8/20\mu s$		8		V
Junction Capacitance	C_j	$V_R = 0V, f = 1MHz$		18		pF

Electrical Parameters (TA = 25°C unless otherwise noted)



Note1: 8/20 μs pulse waveform.

RATING AND CHARACTERISTIC CURVES (ESD5Z3.3C)

Figure 1: Peak Pulse Power vs. Pulse Time

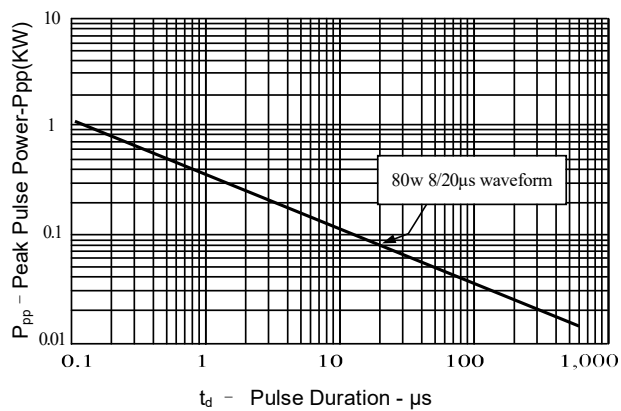


Figure 2: Power Derating Curve

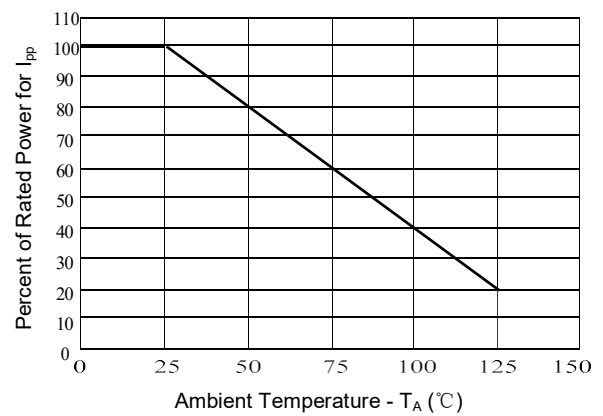


Figure3: Pulse Waveform

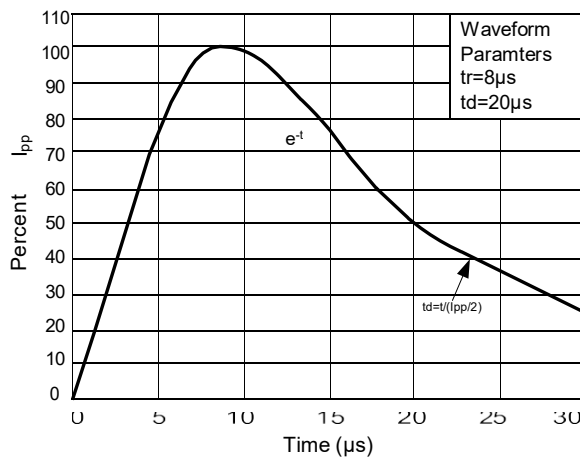


Figure 4: Clamping Voltage vs. I_pp

