

Features

200Watts 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) 3A (8/20 μs)

Applications

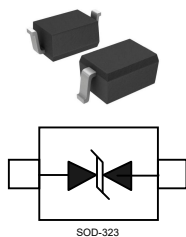
Microprocessor based equipment
 Personal Digital Assistants (PDA's)
 Notebooks, Desktops, and Servers
 Portable Instrumentation
 Pagers Peripherals

Mechanical Data

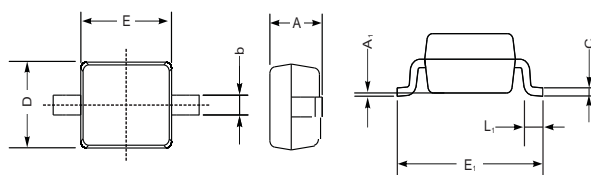
SOD323 package
 Molding compound flammability rating: UL 94V-0
 Packaging: Tape and Reel
 RoHS/WEEE Compliant

Ordering information

Order code	Package	Making
PESD24VL1BA	SOD-323	AF



SOD323



UNIT		A	C	D	E	E ₁	b	L ₁	A ₁
mm	max	1.1	0.15	1.4	1.8	2.75	0.4	0.45	0.2
	min	0.8	0.08	1.2	1.4	2.55	0.25	0.2	—
mil	max	43	5.9	55	70	108	16	16	8
	min	32	3.1	47	63	100	9.8	7.9	—

Absolute Maximum Rating

Rating	Symbol	Value	Units
Peak Pulse Power ($t_p = 8/20\mu s$)	P_{PP}	200	Watts
Peak Pulse Current ($t_p = 8/20\mu s$) (note1)	I_{pp}	3	A
ESD per IEC 61000-4-2 (Air) ESD per IEC 61000-4-2 (Contact)	V_{ESD}	25 25	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

PESD24VL1BA

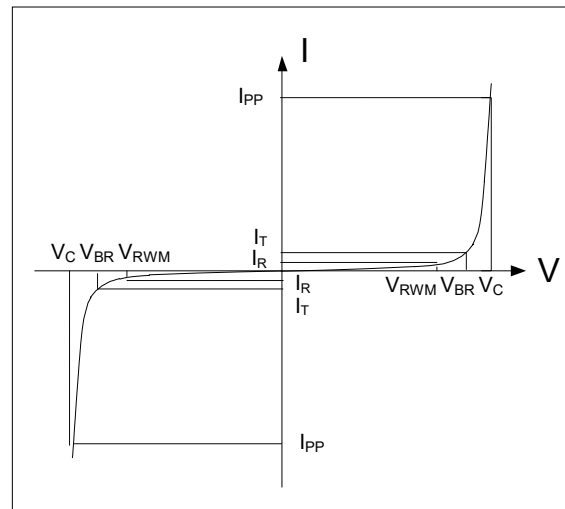
Electrical Characteristics

Parameter	Symbol	Conditions	Min	Typical	Max	Units
Reverse Stand-Off Voltage	V_{RWM}				24.0	V
Reverse Breakdown Voltage	V_{BR}	$I_T=1mA$	25.4			V
Reverse Leakage Current	I_R	$V_{RWM}=24V, T=25^{\circ}C$			0.5	μA
Clamping Voltage	V_C	$I_{PP}=3A, t_p=8/20\mu s$			70	V
Junction Capacitance	C_j	$V_R = 0V, f = 1MHz$		11		pF

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

Symbol	Parameter
I_{PP}	Maximum Reverse Peak Pulse Current
V_C	Clamping Voltage @ I_{PP}
V_{RWM}	Working Peak Reverse Voltage
I_R	Maximum Reverse Leakage Current @ V_{RWM}
V_{BR}	Breakdown Voltage @ I_T
I_T	Test Current

Note: 8/20 μs pulse waveform.



RATING AND CHARACTERISTIC CURVES (PESD24VL1BA)

Figure 1: Peak Pulse Power vs. Pulse Time

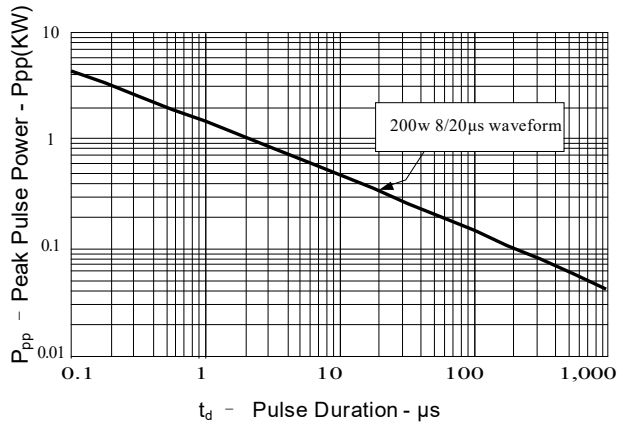


Figure 2: Power Derating Curve

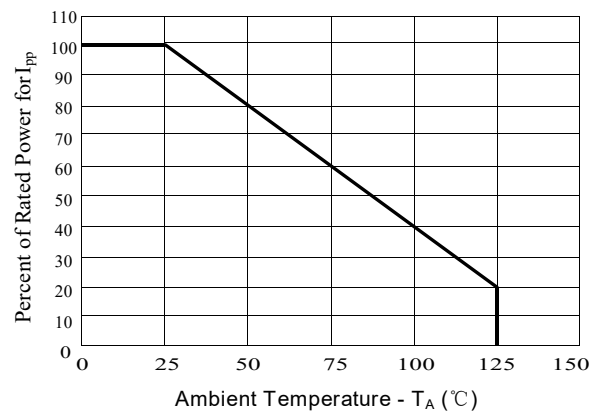


Figure3: Pulse Waveform

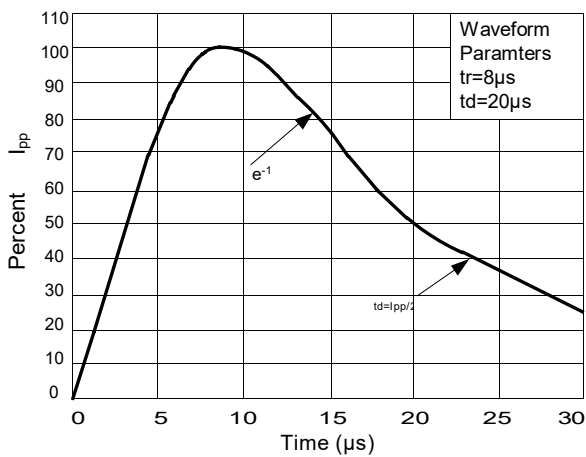


Figure 4: Clamping Voltage vs. I_pp

