

## Transient Voltage Suppressors

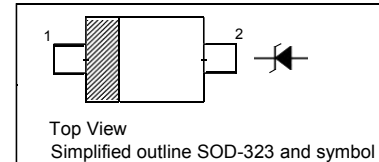
for ESD Protection

### Features

- Low clamping voltage
- Low leakage

### PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



### Absolute Maximum Ratings ( $T_a = 25\text{ }^\circ\text{C}$ )

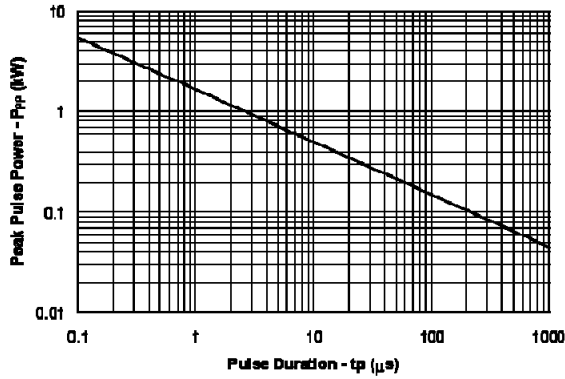
Parameter	Symbol	Value	Unit
Peak Pulse Power ( $t_p = 8/20\ \mu\text{s}$ )	$P_{pk}$	350	W
Peak Pulse Current ( $t_p = 8/20\ \mu\text{s}$ )	$I_{PP}$	24	A
ESD Voltage (HRB Waveform per IEC61000-4-2)	$V_{PP}$	30	KV
Operating Junction Temperature	$T_j$	- 55 to + 125	$^\circ\text{C}$
Storage Temperature Range	$T_{stg}$	- 55 to + 150	$^\circ\text{C}$

### Characteristics at $T_a = 25\text{ }^\circ\text{C}$ ( $V_F = 0.9\text{ V Max.}$ at $I_F = 10\text{ mA}$ )

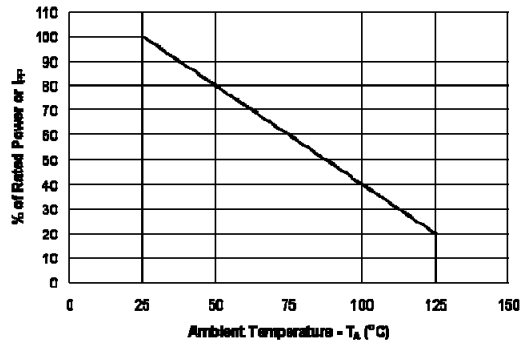
Type	Marking Code	Reverse Stand-off Voltage	Reverse Current	Breakdown Voltage		Clamping Voltage <sup>1)</sup>				Capacitance	
		$V_{RWM}$	$I_R$ at $V_{RWM}$	$V_{BR}$	at $I_T$	$V_C$	at $I_{PP}$	$V_C$	at $I_{PP}$	$C_j$	at f
		Max. (V)	Max. ( $\mu\text{A}$ )	Min. (V)	mA	Max. (V)	A	Max. (V)	A	Max. (pF)	MHz
ESD3Z2V5	2-	2.5	5	4	1	6.5	5	10.9	11	145	1
ESD3Z3V3	3-	3.3	10	5	1	8.4	5	14.1	16	105	1
ESD3Z5V0	5-	5	10	6	1	9.8	5	14.5	24	350	1
ESD3Z6V0	6-	6	5	6.8	1	12.4	5	20.5	8.8	70	1
ESD3Z7V0	7-	7	1	7.5	1	13.5	5	22.7	8.8	65	1
ESD3Z12	12-	12	1	13.3	1	19	5	25	15	150	1

<sup>1)</sup>  $t_p = 8/20\ \mu\text{s}$

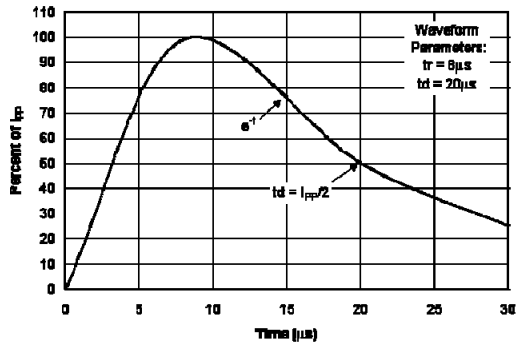
**Non-Repetitive Peak Pulse Power vs. Pulse Time**



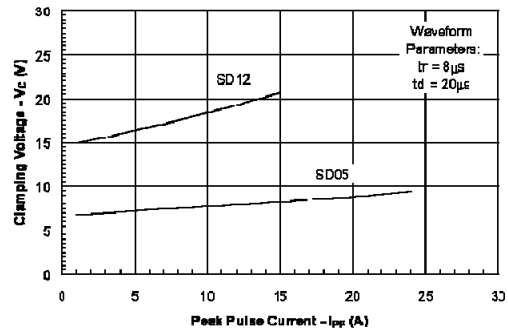
**Power Derating Curve**



**Pulse Waveform**



**Clamping Voltage vs. Peak Pulse Current**

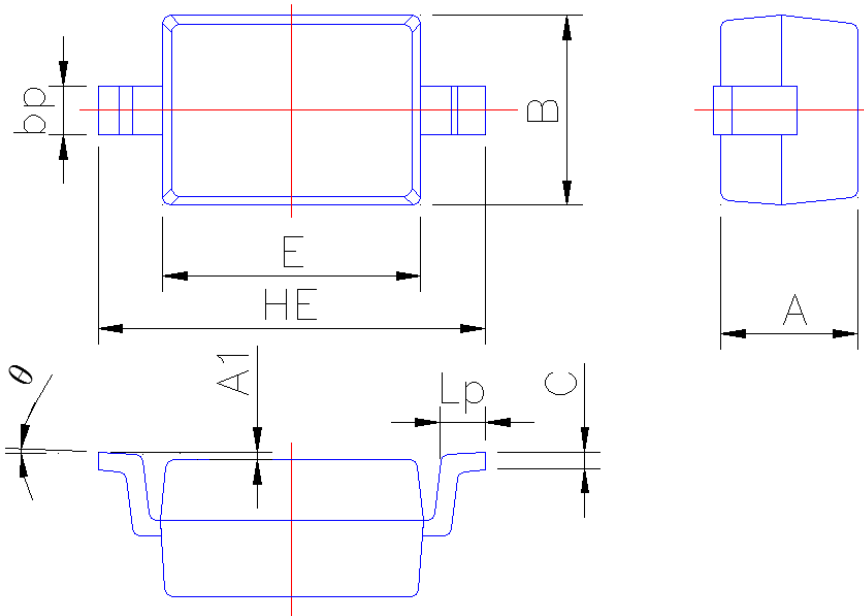




## PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SOD-323



Symbol	Dimension in Millimeters	
	Min	Max
A	0.95	1.15
A1	0.010	0.100
B	1.20	1.40
bp	0.25	0.40
C	0.09	0.150
E	1.60	1.80
HE	2.30	2.70
Lp	0.20	0.40
θ	0°	5°