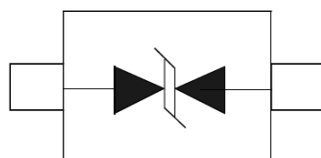


SOD-323

Features

- 550Watts peak pulse power($t_p=8/20\mu s$)
- Low clamping voltage
- Low leakage current
- Glass passivated junction
- Bidirectional configurations
- IEC 61000-4-2 $\pm 30KV$ contact $\pm 30KV$ air
- Halogen free and RoHS compliant

Mechanical Data

- CASE: SOD-323 Molded Plastic
- Molding compound flammability rating: UL 94V-0
- Mounting Position:Any

Making Code & Ordering information

	<table border="1"> <thead> <tr> <th>Ordercode</th> <th>Package</th> <th>Base qty</th> <th>Deliverymode</th> </tr> </thead> <tbody> <tr> <td>PSD3V07C45</td> <td>SOD323</td> <td>3000</td> <td>Tape and reel</td> </tr> </tbody> </table>	Ordercode	Package	Base qty	Deliverymode	PSD3V07C45	SOD323	3000	Tape and reel
Ordercode	Package	Base qty	Deliverymode						
PSD3V07C45	SOD323	3000	Tape and reel						

Maximum Ratings & Thermal Characteristics

(Ratings at 25°C ambient temperature unless otherwise specified.)

Rating	Symbol	Value	Units
Peak Pulse Power ($t_p = 8/20\mu s$)	P_{PP}	550	Watts
Peak Pulse Current ($t_p = 8/20\mu s$)(note1)	I_{pp}	50	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 + 125	°C
Storage Temperature	T_{stg}	-55 to + 125	°C

Electrical Characteristics

(Ratings at 25°C ambient temperature unless otherwise specified).

Parameter	Symbol	Conditions	Min	Typical	Max	Units
Reverse Stand-Off Voltage	V_{RWM}				7.0	V
Reverse Breakdown Voltage	V_{BR}	$I_T=1mA$	7.2	7.5		V
Reverse Leakage Current	I_R	$V_{RWM}=7V, T=25^\circ C$		0.1	0.5	μA
Clamping Voltage	V_C	$I_{PP}=50A, t_p=8/20\mu s$		11		V
Junction Capacitance	C_j	$V_R = 0V, f = 1MHz$		140		pF

Ratings and Characteristic Curves

(Ratings at 25°C ambient temperature unless otherwise specified).

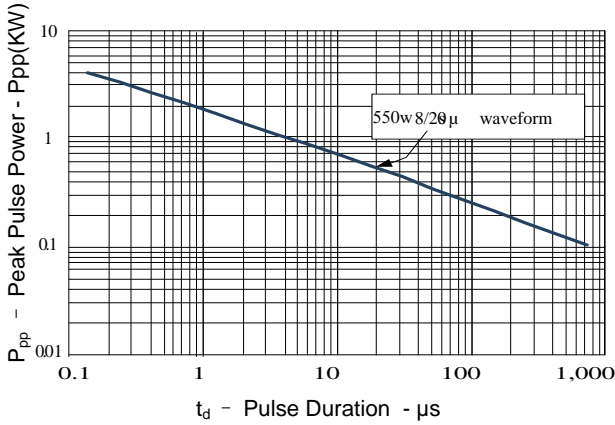


Figure 1: Peak Pulse Power vs. Pulse Time

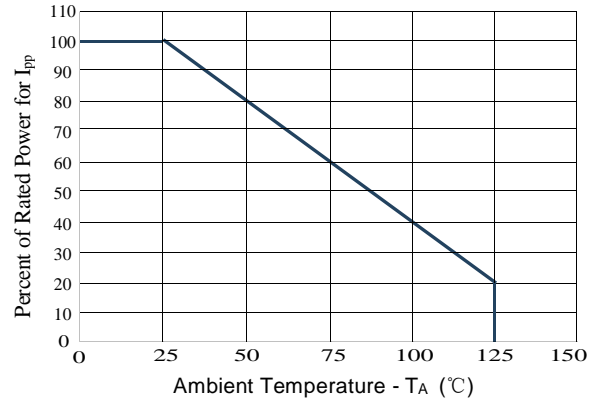


Figure 2: Power Derating Curve

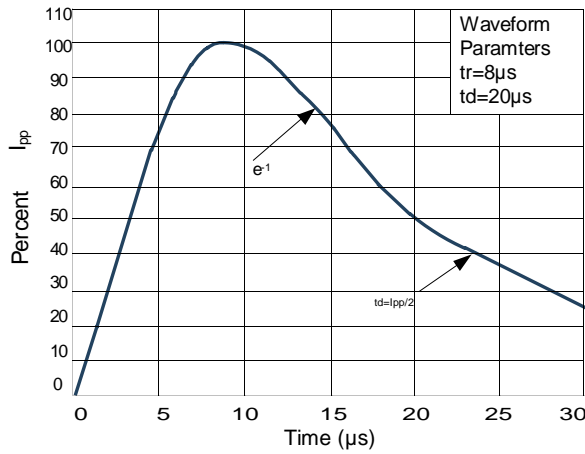


Figure 3: Pulse Waveform

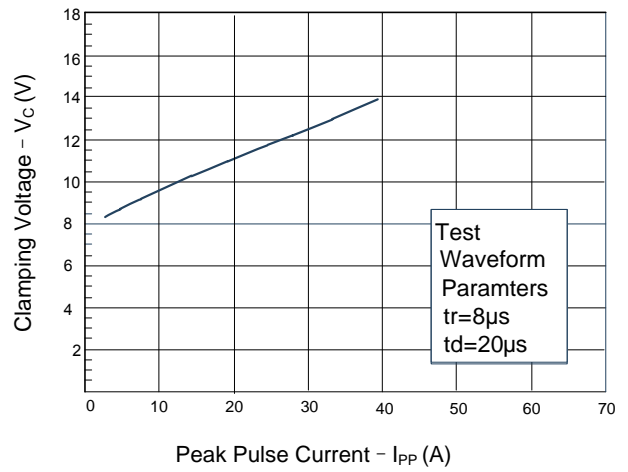
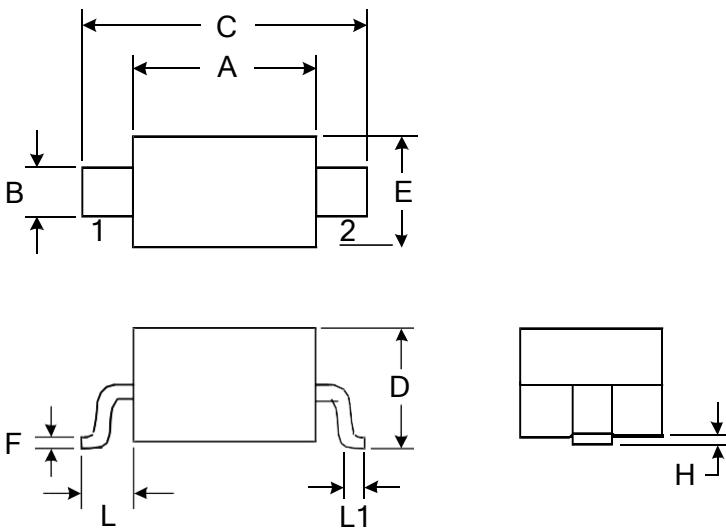


Figure 4: Clamping Voltage vs. Ipp

Package Outline Dimensions: SOD-323



DIMENSIONS				
SYMBOL	MILLIMETER		INCHES	
	MIN	MAX	MIN	MAX
A	1.600	1.800	0.063	0.071
B	0.250	0.350	0.010	0.014
C	2.500	2.700	0.098	0.106
D		1.000		0.039
E	1.200	1.400	0.047	0.055
F	0.080	0.150	0.003	0.006
L	0.475 REF		0.019REF	
L1	0.250	0.400	0.010	0.016
H	0.000	0.100	0.000	0.004