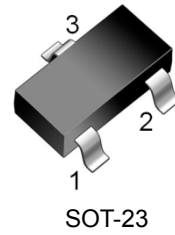


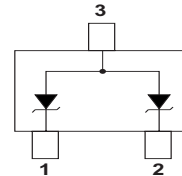
**FEATURES**

- Improved Leakage Current, Maximum of 5 uA @ 5Vdc
- Maximum Capacitance @ 0Vdc Bias of 1.2 pF between terminals 1-3 or terminals 2-3
- IEC61000-4-2 ESD 15kV Air, 8kV Contact Compliance
- IEC61000-4-5 Lightning 17Amps peak, 8x20 (sec Waveform



**MECHANICAL DATA**

- Case: SOT-23
- Terminals: Pure tin plated, lead free



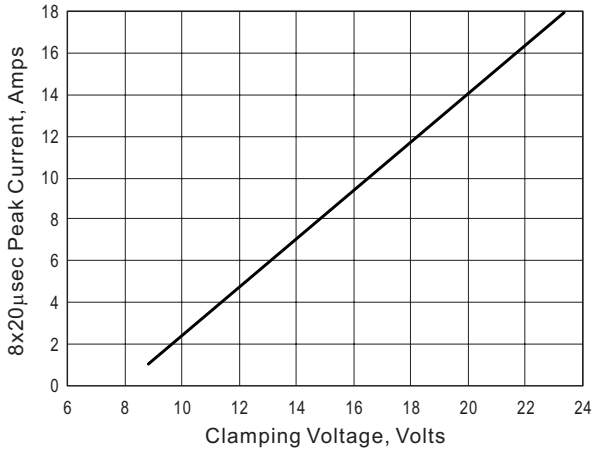
**MAXIMU MRATINGS (T<sub>A</sub> = 25°C unless otherwise noted)**

Parameter	Symbol	Value	Unit
Peak Pulse Power 8x20µsec Waveform	P <sub>PK</sub>	500	W
Peak Pulse Current 8x20µsec Waveform	I <sub>PP</sub>	17	A
ESD Voltage (HBM)	V <sub>ESD</sub>	>25	kV
Operating Temperature	T <sub>L</sub>	-50 to +125	°C
Storage Temperature	T <sub>stg</sub>	-50 to +150	°C

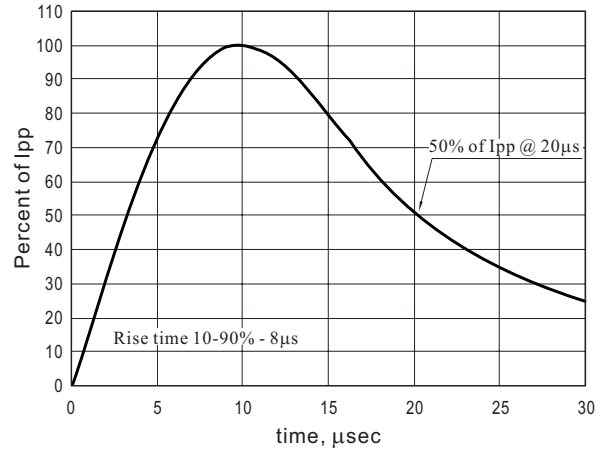
**ELECTRICAL CHARACTERISTICS (T<sub>A</sub> = 25°C unless otherwise noted)**

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Reverse Stand-Off Voltage	V <sub>RWM</sub>				5	V
Reverse Breakdown Voltage	V <sub>BR</sub>	I <sub>BR</sub> = 1mA	6			V
Reverse Leakage Current	I <sub>R</sub>	V <sub>RWM</sub> = 5V T <sub>A</sub> = 25°C			5	uA
Clamping Voltage	V <sub>C</sub>	I <sub>PP</sub> = 20A ,8 x 20 µsec			10	V
Maximum Peak Pulse Current	I <sub>PP</sub>	8 x 20 µsec ,			30	A
Junction Capacitance (Per leg)	C <sub>j</sub>	0Vdc, 1MHz			550	pF
Junction Capacitance (Per leg)	C <sub>j</sub>	0Vdc, 1MHz ,between pin 1 and 2			220	pF

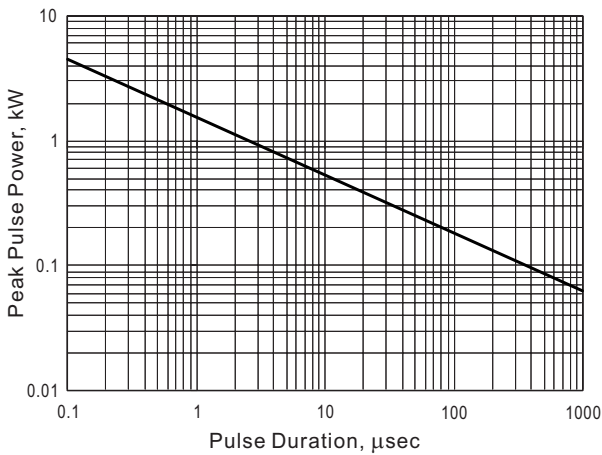
**Typical Characteristics**



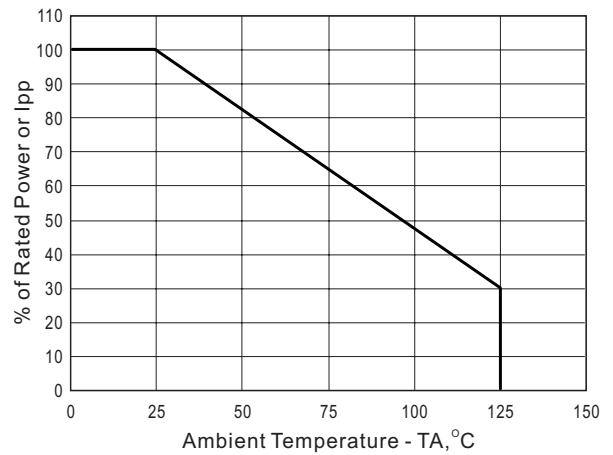
**Clamping Voltage vs I<sub>pp</sub> 8x20µsec**



**Pulse Waveform**

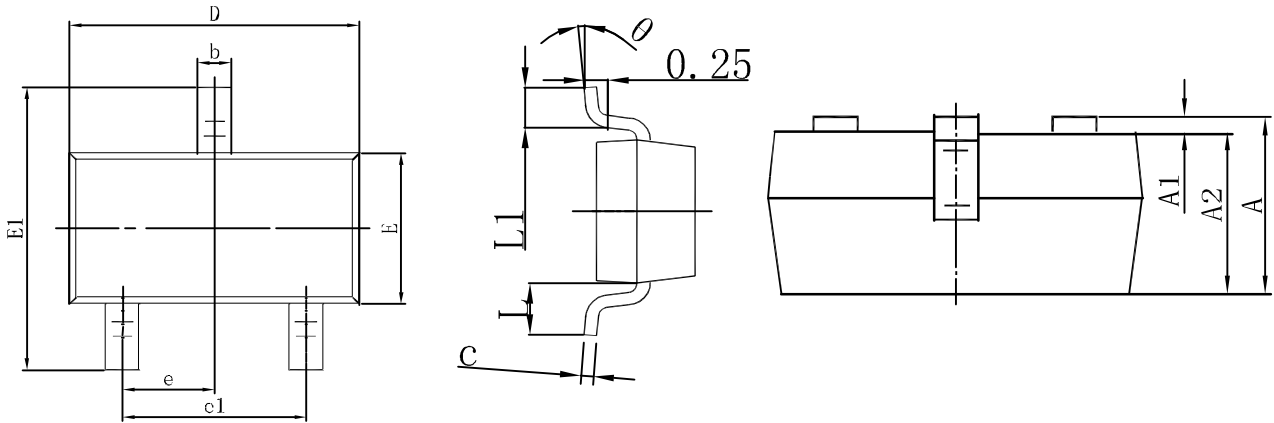


**Non-Repetitive Peak Pulse Power vs Pulse Time**



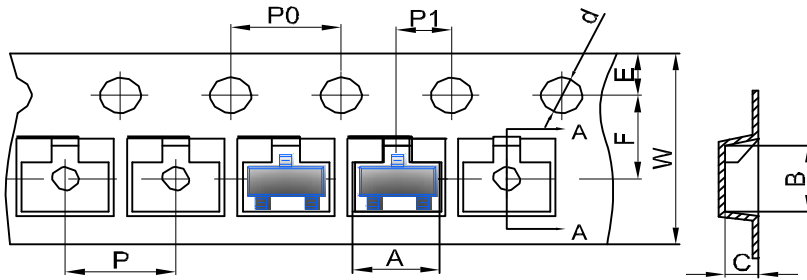
**Power Derating Curve**

SOT-23 Package Outline Dimensions



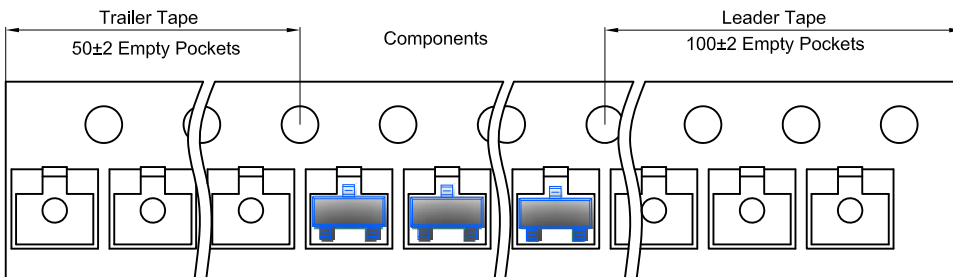
Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	0.900	1.150	0.035	0.045
A1	0.000	0.100	0.000	0.004
A2	0.900	1.050	0.035	0.041
b	0.300	0.500	0.012	0.020
c	0.080	0.150	0.003	0.006
D	2.800	3.000	0.110	0.118
E	1.200	1.400	0.047	0.055
E1	2.250	2.550	0.089	0.100
e	0.950 TYP		0.037 TYP	
e1	1.800	2.000	0.071	0.079
L	0.550 REF		0.022 REF	
L1	0.300	0.500	0.012	0.020
θ	0°	8°	0°	8°

**SOT-23 Embossed Carrier Tape**

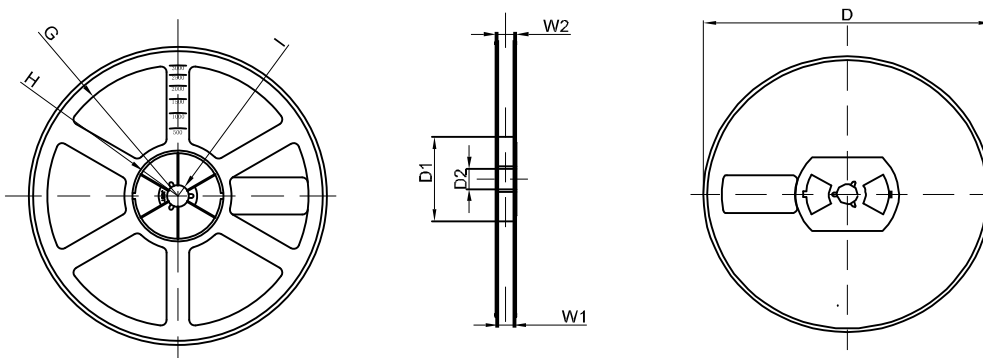


DIMENSIONS ARE IN MILLIMETER									
TYPE	A	B	C	d	E	F	P0	P	P1
SOT-23	3.15	2.77	1.22	φ1.50	1.75	3.50	4.00	4.00	2.00
TOLERANCE	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1

**SOT-23 Tape Leader and Traller**



**SOT-23 Reel**



DIMENSIONS ARE IN MILLIMETER								
REEL OPTION	D	D1	D2	G	H	I	W1	W2
7" DIA	φ178	54.40	13.00	R78	R25.60	R6.50	9.50	12.30
TOLERANCE	±2	±1	±1	±1	±1	±1	±1	±1