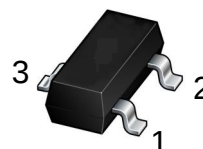
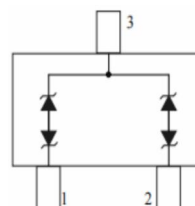


Features

- ★ Low capacitance.
- ★ Low clamping voltage.
- ★ ESD protection
- ★ Complies with IEC 61000-4-2 standards: Air discharge: $\pm 30\text{kV}$
Contact discharge: $\pm 30\text{kV}$
- ★ We declare that the material of product compliance with RoHS requirements and Halogen Free.



SOT23



Circuit Diagram

Absolute Maximum Ratings (T_{amb}=25°C unless otherwise specified)

Symbol	Parameter	Value	Units
P _{PP}	Peak Pulse Power (t _p = 8/20μs)	200	W
T _L	Maximum lead temperature for soldering during 10s	260	°C
T _{stg}	Storage Temperature Range	-55 to +150	°C
T _{op}	Operating Temperature Range	-55 to +125	°C
T _j	Maximum junction temperature	150	°C
	IEC61000-4-2 (ESD) air discharge	±30	KV
	contact discharge	±30	
	IEC61000-4-4 (EFT)	15	A

Electrical Characteristics (TA=25°C unless otherwise specified)

Characteristic	Symbol	MIN	MIN	MAX	Unit
Reverse stand-off voltage (Pin 1、 2 to Pin 3) (Pin 3 to Pin 1、 2)	VRWM	- -	- -	12 7	V
Reverse breakdown voltage (IT = 1 mA,Pin 1、 2 to Pin 3) (IT = 1 mA,Pin 3 to Pin 1、 2)	VBR	13.3 7.5	- -	- -	V
Reverse leakage current (VR = VRWM,Pin 1、 2 to Pin 3) (VR = VRWM,Pin 3 to Pin 1、 2)	IR	- -	- -	100 200	nA
Clamping Voltage (IPP = 10A (8 x 20μs pulse),Pin 1、 2 to Pin 3) (IPP = 10A (8 x 20μs pulse),Pin 3 to Pin 1 、 2)	VC	- -	- -	12 20	V
Junction Capacitance (VR = 0V, f = 1MHz,Pin 1、 2 to Pin 3) (VR = 0V, f = 1MHz,Pin 3 to Pin 1、 2)	CJ	- -	- -	15 15	pF

Typical Performance Characteristics ($T_A=25^\circ\text{C}$ unless otherwise Specified)

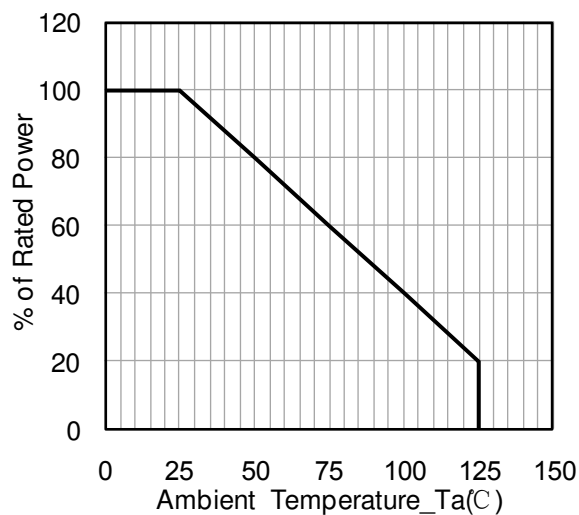


Figure 1. Power Derating Curve

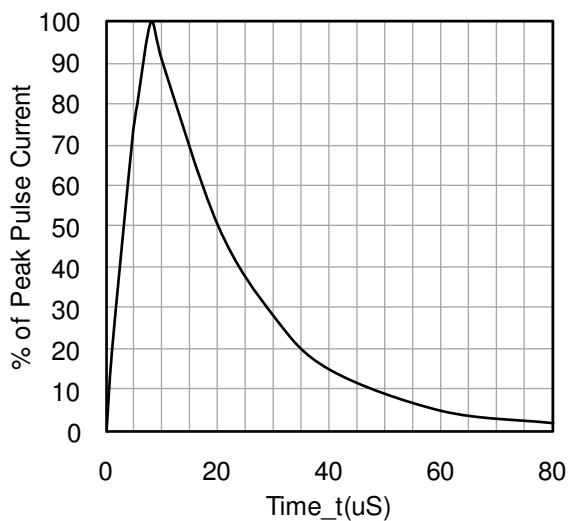


Figure 2. 8 X 20uS Pulse Waveform

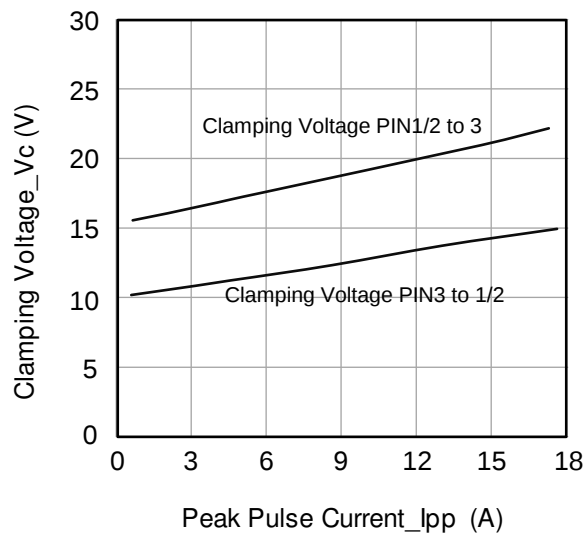


Figure 3. Clamping Voltage vs. Peak Pulse Current

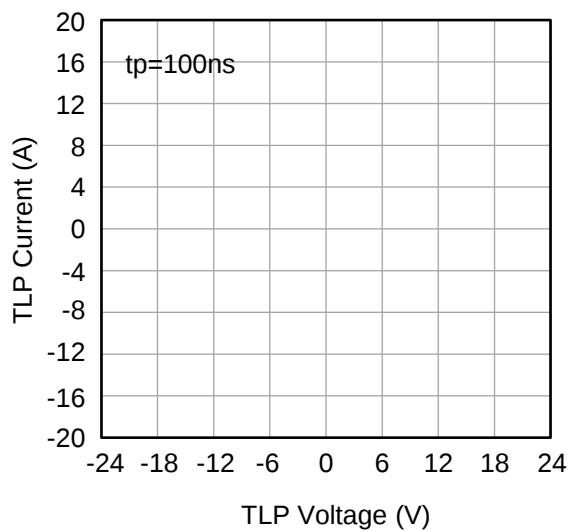
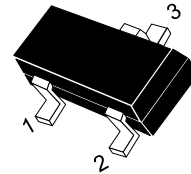
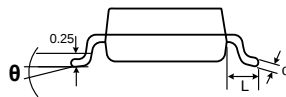
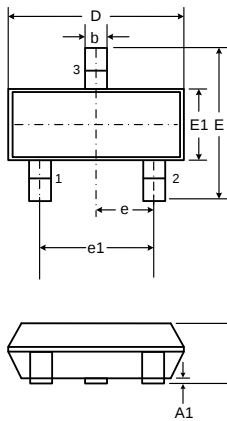


Figure 4. TLP Measurement

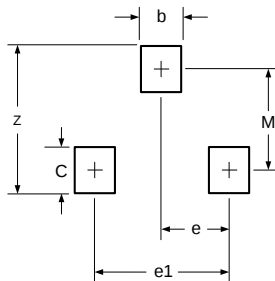
Outline Drawing – SOT23

PACKAGE OUTLINE



DIMENSIONS

SYMBOL	MILLIMETER		INCHES	
	MIN	MAX	MIN	MAX
A	0.90	1.15	0.035	0.045
A1	0.00	0.10	0.000	0.004
b	0.30	0.50	0.012	0.020
c	0.08	0.15	0.003	0.006
D	2.80	3.00	0.110	0.118
E	2.25	2.55	0.089	0.100
E1	1.20	1.40	0.047	0.055
e	0.95 BSC		0.0374 BSC	
e1	1.80	2.00	0.071	0.079
L	0.45	0.65	0.018	0.026
θ	0	8°	0	8°



DIMENSIONS

DIM	INCHES	MILLIMETERS
M	0.080	2.02
C	0.032	0.80
Z	0.111	2.82
e	0.037 BSC	0.95 BSC
e1	0.075 BSC	1.90 BSC
b	0.032	0.80

Notes

1. Dimensioning and tolerances per ANSI Y14.5M, 1985.
2. Controlling Dimension: Inches
3. Pin 3 is the cathode (Unidirectional Only).
4. Dimensions are exclusive of mold flash and metal burrs.