

Features

- 480W peak pulse power (8/20μs)
- Protects two bi-directional lines
- Ultra low leakage: nA level
- Operating voltage: 3V
- Low clamping voltage
- Complies with following standards:
 - IEC 61000-4-2 (ESD) immunity test
 - Air discharge: ±30kV
 - Contact discharge: ±30kV
- RoHS Compliant

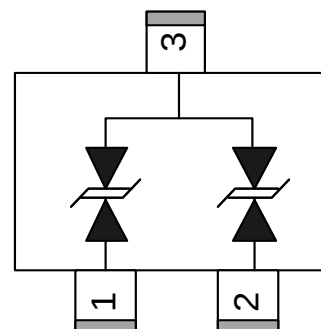
Dimensions SOT-23



Applications

- Cellular Handsets and Accessories
- Notebooks and Handhelds
- Portable Instrumentation
- Set Top Box
- Industrial Controls
- Server and Desktop PC

Pin Configuration



Mechanical Characteristics

- Package: SOT-23
- Lead Finish: Matte Tin
- Case Material: "Green" Molding Compound.
- Quantity Per Reel: 3000pcs
- Terminal Connections: See Diagram Below
- Marking Information: 3B2

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

Parameter	Symbol	Value	Unit
Peak Pulse Power (8/20μs)	P _{pp}	480	W
ESD per IEC 61000-4-2 (Air)	V _{ESD}	±30	kV
ESD per IEC 61000-4-2 (Contact)		±30	
Operating Temperature Range	T _J	-55 to +125	°C
Storage Temperature Range	T _{STJ}	-55 to +125	°C

Electrical Characteristics

Parameter	Symbol	Conditions	Min	Typical	Max	Units
Reverse Stand-Off Voltage	V_{RWM}				3.0	V
Reverse Breakdown Voltage	V_{BR}	$I_T=1mA$	4.0			V
Reverse Leakage Current	I_R	$V_{RWM}=3V, T=25^{\circ}C$		0.1	0.5	μA
Peak Pulse Current	I_{PP}	$t_p=8/20\mu s$		40		A
Clamping Voltage	V_C	$I_{PP}=40A, t_p=8/20\mu s$		12		V
Junction Capacitance	C_j	$V_R=0V, f=1MHz$ (Pin 1 to Pin 3)		80		pF

Typical Characteristics

Figure 1: Peak Pulse Power vs. Pulse Time

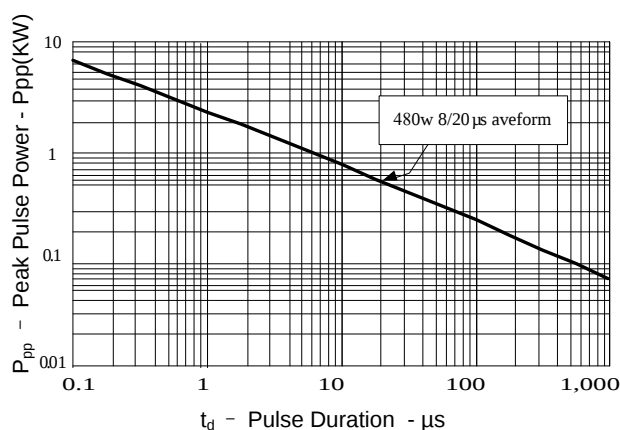


Figure 2: Power Derating Curve

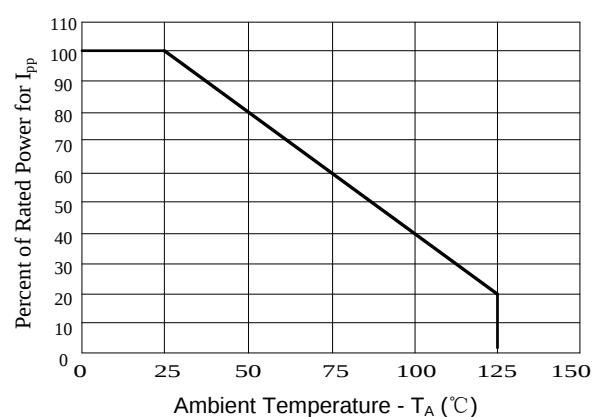


Figure3: Pulse Waveform

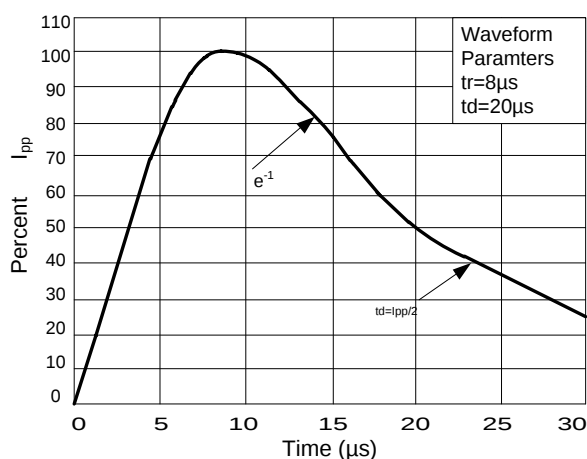
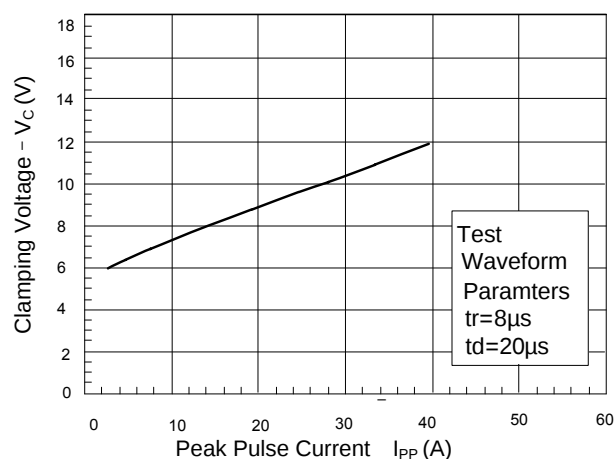
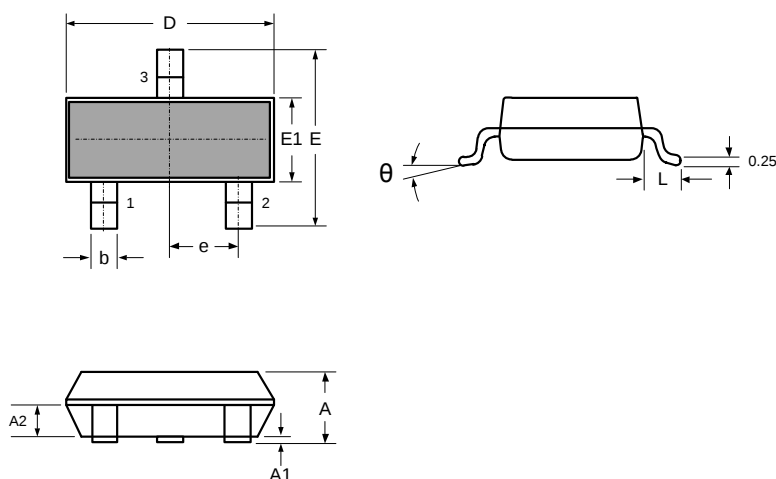


Figure 4: Clamping Voltage vs.Ipp



Outline Drawing – SOT-23



SYMBOL	DIMENSIONS			
	MILLIMETER		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
D	2.800	3.000	0.110	0.118
b	0.300	0.500	0.012	0.020
E	2.250	2.550	0.089	0.100
E1	1.200	1.400	0.047	0.055
e	0.950 BSC		0.037 BSC	
L	0.300	0.500	0.012	0.020
θ	0	8°	0	8°

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