

Features

- ◆ 200W peak pulse power(8/20 μ s)
- ◆ Ultra low leakage: nA level
- ◆ Operating voltage: 3.3V
- ◆ Low clamping voltage
- ◆ Complies with following standards:
 - IEC 61000-4-2 (ESD) immunity test
Air discharge: ± 30 kV
Contact discharge: ± 30 kV
 - IEC61000-4-4 (EFT) 40A (5/50ns)
 - IEC61000-4-5 (Lightning) 22A (8/20 μ s)
- ◆ RoHS Compliant

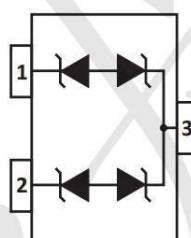
Mechanical Characteristics

- ◆ Package: SOT-23
- ◆ Lead Finish: Matte Tin
- ◆ Case Material: "Green" Molding Compound.
- ◆ UL Flammability Classification Rating 94V-0
- ◆ Moisture Sensitivity: Level 3 per J STD 020
- ◆ Shipping Qty :3000pcs/7Inch Tape & Reel

Applications

- ◆ Cellular Handsets and Accessories
- ◆ Notebooks and Handhelds
- ◆ Portable Instrumentation
- ◆ Set Top Box
- ◆ Industrial Controls

Dimensions and Pin Configuration



Absolute Maximum Ratings (Tamb=25°C unless otherwise specified)

Parameter	Symbol	Value	Unit
Peak Pulse Power (8/20μs)	Ppk	200	W
Peak Pulse Current (8/20μs)	Ipp	22	A
ESD per IEC 61000-4-2 (Air)	VESD	±30	kV
ESD per IEC 61000-4-2 (Contact)		±30	
Operating Temperature Range	T _J	-55 to +125	°C
Storage Temperature Range	T _{stg}	-55 to +150	°C

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

Parameter	Symbol	Min	Typ	Max	Unit	Test Condition
Reverse Working Voltage	V _{RWM}			3.3	V	
Breakdown Voltage	V _{BR}	3.8	4.4	5.0	V	I _T = 1mA
Reverse Leakage Current	I _R			0.1	uA	V _{RWM} = 3.3V
Clamping Voltage	V _C			6	V	I _{pp} =1A(8x 20us pulse)
Clamping Voltage	V _C		8	10	V	I _{pp} =20A (8x 20us pulse)
Junction Capacitance	C _J		30	50	pF	VR=0, f=1MHz, Pin 1 to Pin 3 or Pin 2 to Pin 3
Junction Capacitance	C _J		17		pF	VR=0, f=1MHz, Pin1 to Pin 2 or Pin 2 to Pin1

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

Fig1. 8/20 μs Pulse Waveform

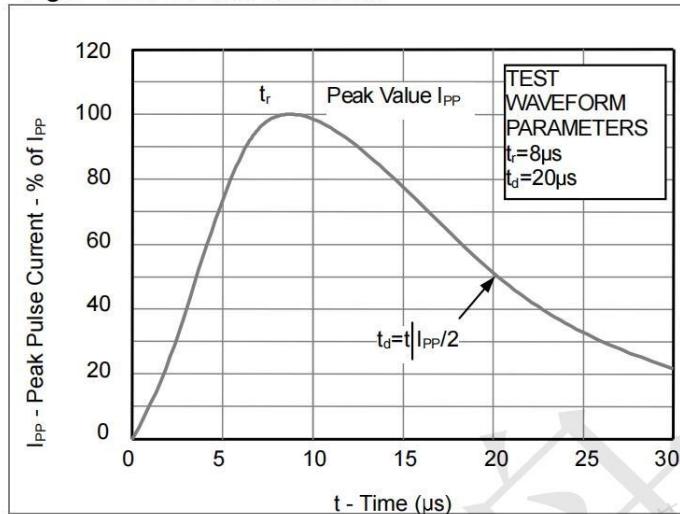


Fig2. ESD Pulse Waveform (according to IEC 61000-4-2)

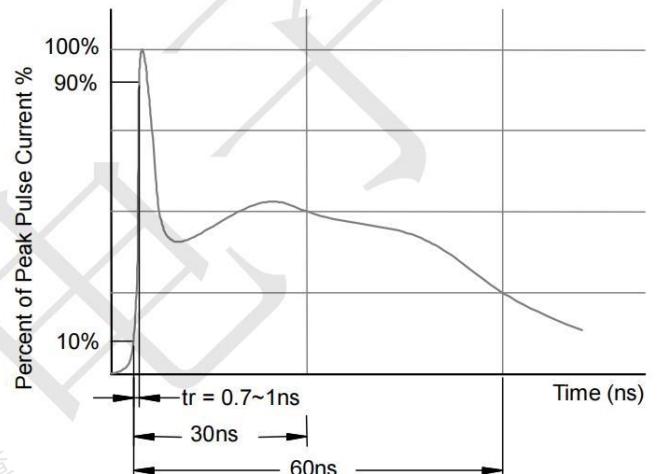
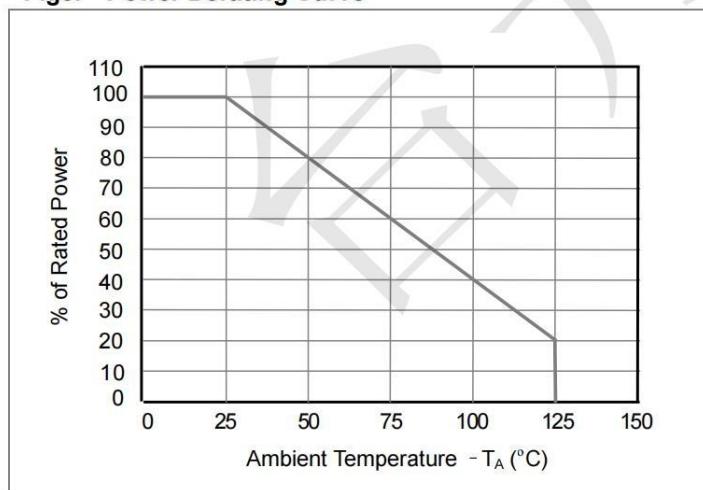
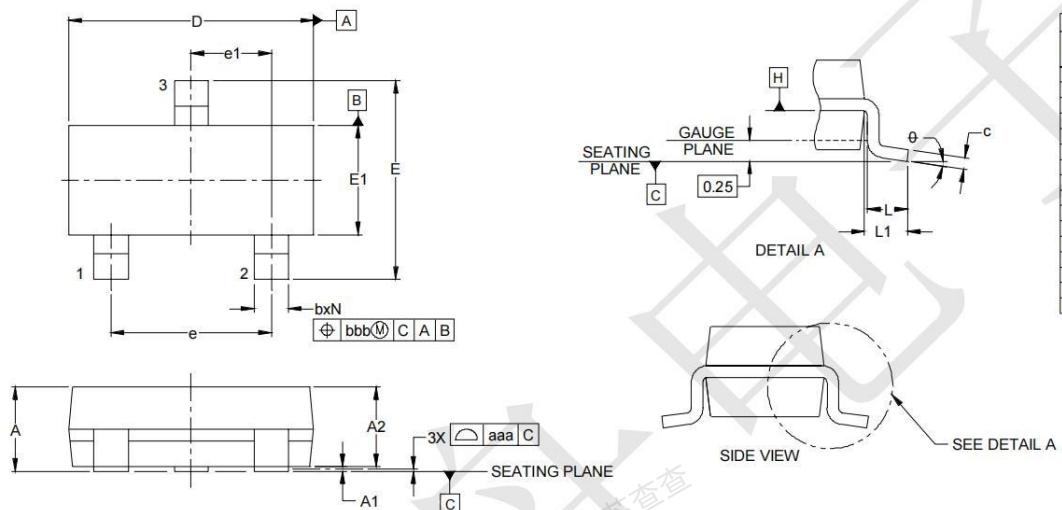


Fig3. Power Derating Curve



Outline Drawing - SOT23



DIMENSIONS					
DIM	INCHES	MILLIMETERS			
		MIN	NOM	MAX	
A	.035	-.000	.044	.089	-.1.12
A1	.000	-.004	.001	-.010	
A2	.035	.037	.040	.088	.095
b	.012	-.020	.030	-.051	
c	.003	-.007	.008	-.018	
D	.110	.114	.120	.280	.290
E	.082	.093	.104	.210	.237
E1	.047	.051	.055	.120	.130
e	.075	-.075	.190	BSC	
e1	.037	-.020	.024	.040	.050
L	.015	.020	.022	.055	.060
L1			.022		(.055)
N		3		3	
θ	0°	-.8°	0°	-.8°	
aaa	.004	-.004	.010		
bbb	.008	-.008	.020		

Land Pattern - SOT23

