

Features

- ◆ 250W peak pulse power(8/20 μ s)
- ◆ Protects two bi-directional lines
- ◆ Ultra low leakage: nA level
- ◆ Operating voltage: 24V
- ◆ 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)5A (8/20 μ s)
- ◆ RoHS Compliant

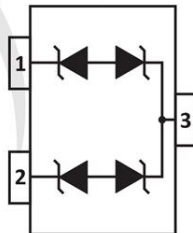
Mechanical Characteristics

- ◆ SOT-23 package
- ◆ Molding compound flammability rating:
 - ◆ UL 94V-0
- ◆ Packaging: Tape and Reel per EIA 481
- ◆ Shipping Qty :3000pcs/7Inch Tape & Reel

Applications

- ◆ CAN Bus Protection
- ◆ Automotive Appllcatrons

Dimensions and Pin Configuration



Marking: 24C Or M24CB

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

Parameter	Symbol	Value	Unit
Peak Pulse Power(8/20μs)	Ppk	250	W
ESD per IEC 61000-4-2 (Air)	VESD	±30	kV
ESD per IEC 61000-4-2 (Contact)		±30	
Operating Temperature Range	TJ	-55 to +125	°C
Storage Temperature Range	Tstg	-55 to +150	°C

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

Parameter	Symbol	Min	Typ	Max	Unit	Test Condition
Reverse Working Voltage	VRWM			24	V	
Breakdown Voltage	VBR	26.5		32	V	IT = 1mA
Reverse Leakage Current	IR			0.08	uA	VRWM = 24V
Clamping Voltage	VC		33		V	I _{PP} = 1A (8 x 20μs pulse)
Clamping Voltage	VC			50	V	I _{PP} = 5A (8 x 20μs pulse)
Peak Pulse Current	I _{PP}			5.5	A	t _p = 8/20μs
Junction Capacitance	CJ		17		pF	VR = 0V, f = 1MHz, Pin 1 to Pin 2

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

Fig1. 8/20 μs Pulse Waveform

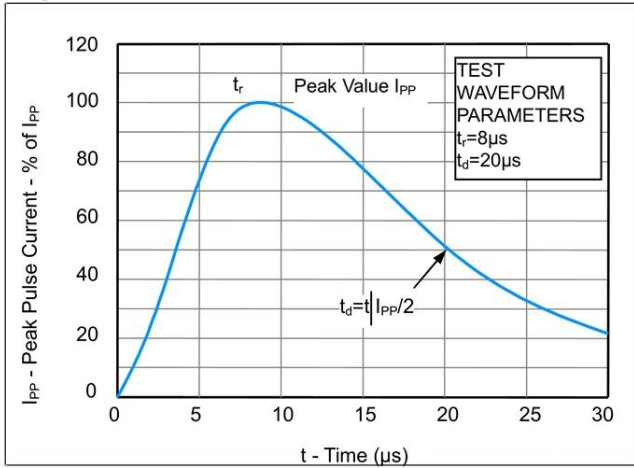


Fig2. ESD Pulse Waveform (according to IEC 61000-4-2)

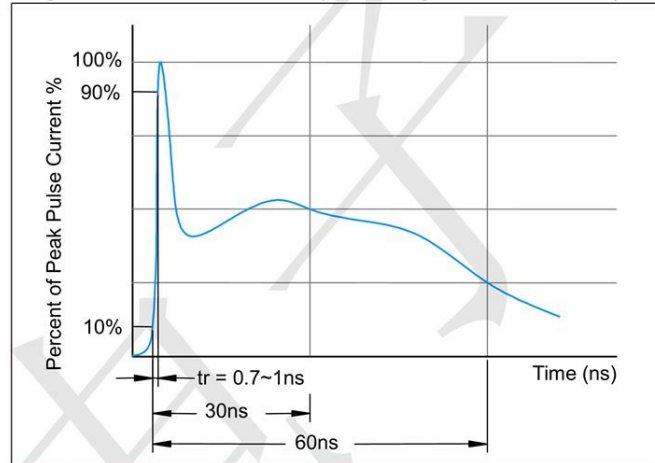
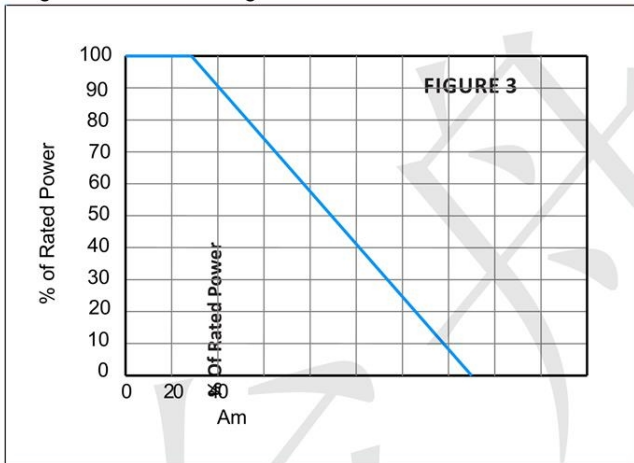
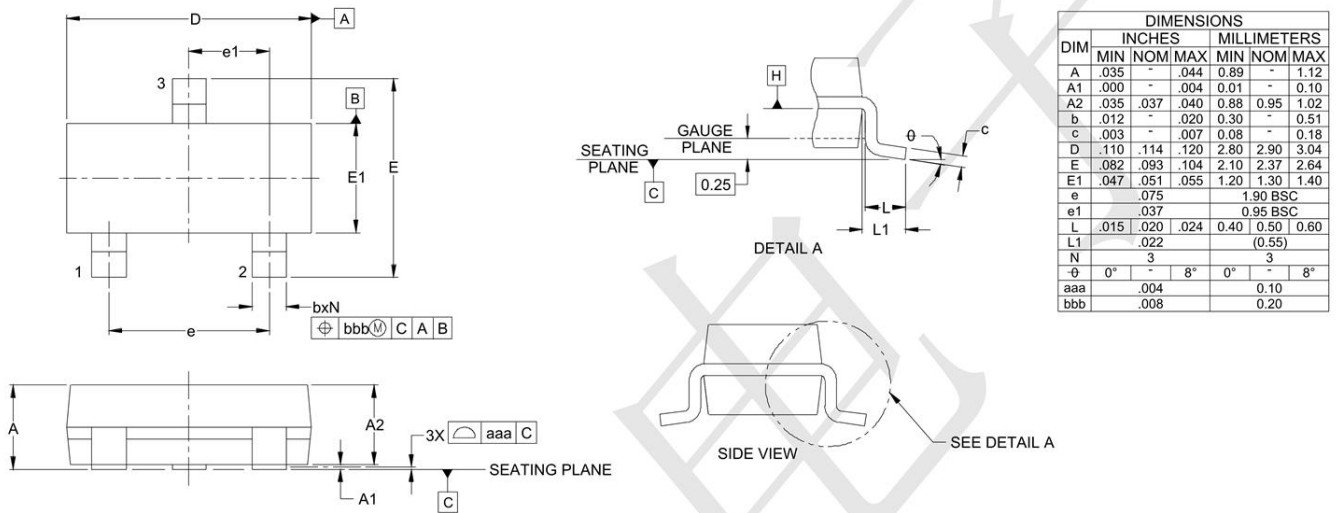


Fig3. Power Derating Curve



Outline Drawing - SOT23



Land Pattern - SOT23

