

Transient Suppressor Protection Device BT008SS

Descriptions

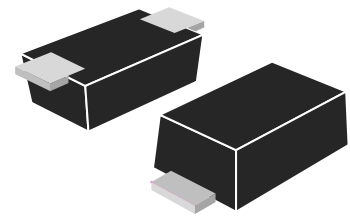
Boarden BT008SS is professionally designed to protect high speed Security Equipments from both Lightning Surge and ESD events. BT008SS can help equipment to meet Telecom standard as ITU K.20/K21, and ESD standard as IEC 61000-4-5. The device is with a ultra-high ESD Protections capability as against ESD surge wave as 30KV (contact) and 30KV (air), as well as extremely high lightning endurance capability as 2000V(10/700us) with small factor as SOD123FL. The inherent low off-state leakage current provides superior performance in low voltage high speed applications. These characteristics allow protection of the system without distortion of the high speed data signal.

Features

- Low Protection Voltage
- Low Leakage Current less than 5 μ A
- Bi-direction Protection Devices
- Response Time is < 1ns
- Solid-state silicon technology
- RoHS Compliant
- Meets MSL 1 Requirements

Device Ratings and Specifications

Parameter	Symbol	Condition	Value	Unit
Peak Off-state Voltage	V_{DRM}		6	V
Maximum Off-state Current	I_{DRM}	@ V_{DRM}	5	μ A
Maximum Switching Voltage	V_S	@ I_S	20	V
Switching Current	I_S		800	mA
Maximum On-state Voltage	V_T	@ I_T	4	V
On-state Current	I_T		2.2	A
Minimum Holding Current	I_H		30	mA
Off-state Capacitance	C_0	@2Vdc, 1MHz	50	pF
Repetitive Peak Pulse Voltage		@10/700 μ s	2000	V
Peak Pulse Current		@8/20 μ s	130	A
Operating Junction Temperature	T_J		-40 to +150	$^{\circ}$ C
Storage Temperature Range	T_S		-55 to +150	$^{\circ}$ C
Junction to Ambient on Printed Circuit	$R_{\theta JA}$		90	$^{\circ}$ C/W



SOD123FL



Circuit diagram

Applications

- Audio/Video Line
- RS-485
- Peripherals
- Networking and Telecom
- Serial and Parallel Ports

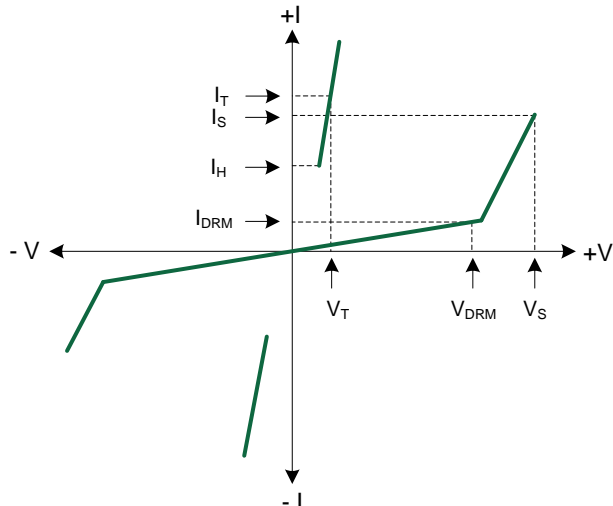
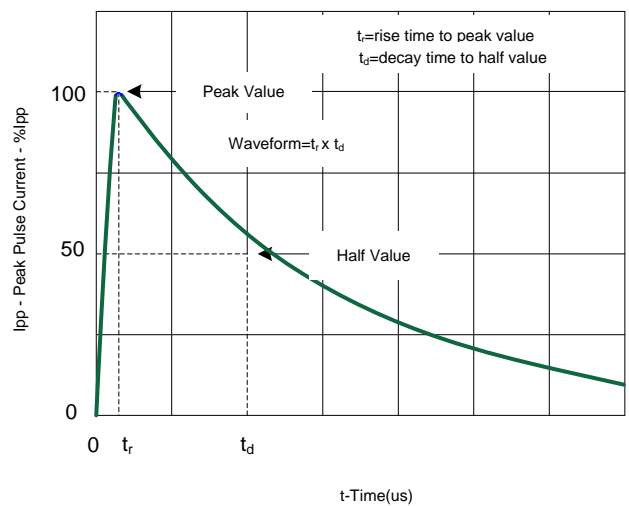
Order information

Device	Quantity	Reel Size
BT008SS	3000	7 Inch

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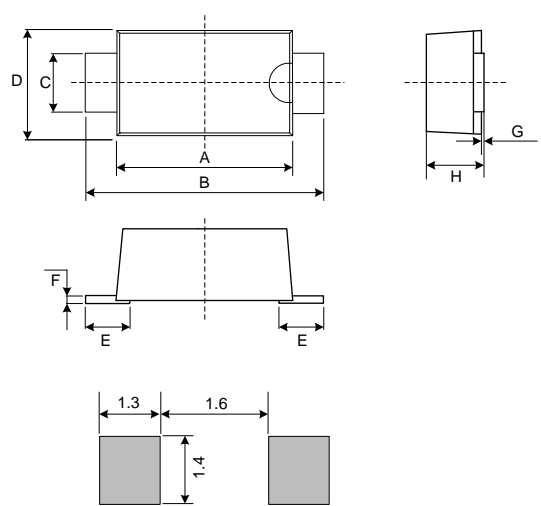
Waveform	8x20 us	10/700us	ESD Air	ESD Contact
Value	130 A	2000V	30 kV	30 kV

Typical electrical characters applications

V - I Characteristics

TrXtd Pulse Waveform


Product Dimensions

Dimensions	Inches		Millimeters	
	Min	Max	Min	Max
A	0.0984	0.1142	2.50	2.90
B	0.1339	0.1535	3.40	3.90
C	0.0275	0.0472	0.70	1.20
D	0.0591	0.0787	1.50	2.00
E	0.0138	0.0354	0.35	0.90
F	0.0020	0.0102	0.05	0.26
G	0.0000	0.0039	0.00	0.10
H	0.0374	0.0433	0.95	1.10

SOD123FL

Mounting Pad Layout (mm)

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 Specifications are subject to change without notice.
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