

Dual Transient Voltage Suppressors for ESD Protection

Features

- SOT-323 Package
- 2 Unidirectional Transil functions
- Peak Power Dissipation 300W @8 x 20 us Pulse
- Low Leakage
- Fast Response Time < 1 ns
- Protects RS232 I/O Port
- ESD Protection to IEC 61000-4-2 Level 4, 15KV(Air), 8KV(Contact)
- 16KV Human Body Model ESD Requirements
- RoHS Compliant in Lead-Free Versions

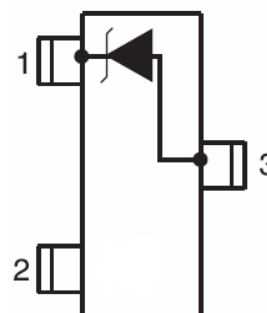
SOT-323



1. BASE
2. EMITTER
3. COLLECTOR

Applications

- Computers
- Printers
- Communication Systems

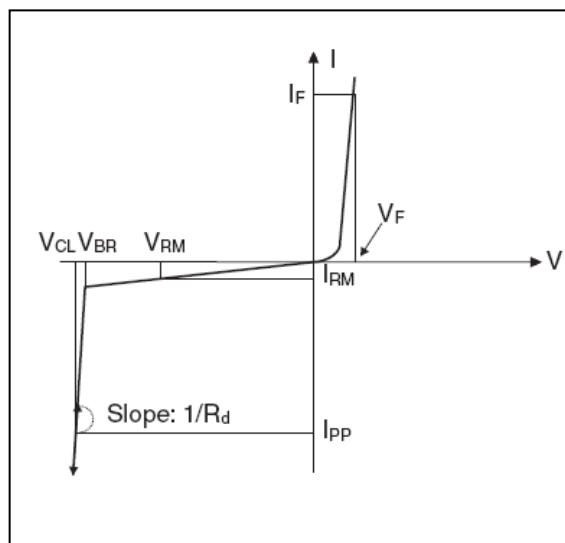


Absolute Maximum Ratings

Symbol	Parameter	Value	Units
P_{PP}	Peak Pulse Power ($t_p = 8/20\mu s$)	300	W
T_L	Maximum lead temperature for soldering during 10s	260	°C
T_{stg}	Storage Temperature Range	-55 to +15	°C
T_{op}	Operating Temperature Range	-40 to +125	°C
T_j	Maximum junction temperature	150	°C
V_{PP}	Electrostatic discharge		
	MIL STD 883C -Method 3015-6	25	kv
	IEC61000-4-2 air discharge	16	
	IEC61000-4-2 contact discharge	9	

Electrical Characteristics

Symbol	Parameter
V_{RM}	Stand-off voltage
V_{BR}	Breakdown voltage
V_{CL}	Clamping voltage
I_{RM}	Leakage current
I_{PP}	Peak pulse current
αT	Voltage temperature coefficient
V_F	Forward voltage drop
C	Capacitance
R_d	Dynamic resistance



Electrical Characteristics Ratings at 25°C ambient temperature unless otherwise specified.

Part Numbers	Marking	Rated Stand-off Voltage	Maximum Leakage Current	Minimum Breakdown Voltage	Maximum Clamping Voltage		Maximum Pulse Peak Current	Maximum Capacitance
			@ V_{RM}	1mA	1A ¹⁾	5A ¹⁾	tp=8/20us	0v, 1MHz
			I_{RM}	V_{BR}	V_{CL}		I_{PPM}	C
			μA	V	V	V	A	pF
ESDSOT04W	04	4.0	20.0	5.0	8.5	10.5	17	300
ESDSOT05W	05	5.0	20.0	6.0	9.8	12.5	17	220
ESDSOT08W	08	8.0	5.0	8.5	13.4	15.0	15	190
ESDSOT12W	12	12.0	1.0	13.3	19.0	28.0	12	150
ESDSOT15W	15	15.0	1.0	16.7	24.0	35.0	10	140
ESDSOT24W	24	24.0	1.0	26.7	43.0	60.0	5	83
ESDSOT36W	36	36.0	1.0	40	60.0	75.0	2	80

1).8/20 waveform used. (see fig2.)

Typical Characteristics

