

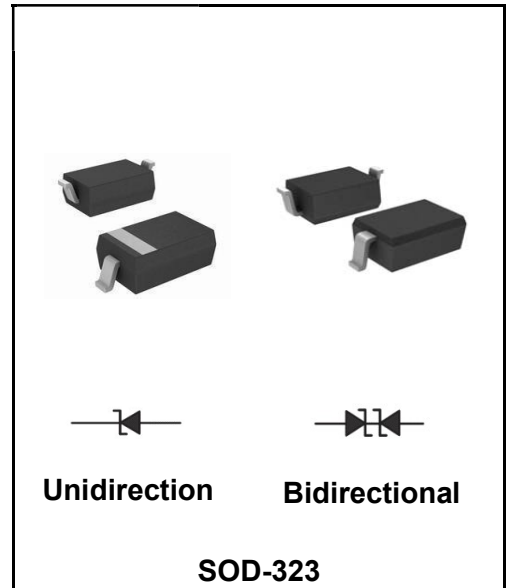
Transient Voltage Suppressor

Features

- ◆350 watts peak pulse power (tp = 8/20μs)
- ◆Unidirectional & Bidirectional Configurations
- ◆Protects One Power or I/O Port
- ◆ESD Protection > 40 kilovolts
- ◆Low Clamping Voltages
- ◆Available in Multiple Voltage Types Ranging from 3V to 24V
- ◆Ultra Low Capacitance: 1.0 pF Typical
- ◆IEC 61000-4-2 (ESD) ±8 KV contact ±15 KV Air
- ◆IEC 61000-4-4 (EFT) 40A (5/50ns)
- ◆IEC 61000-4-5(Surge): 12A, 8/20 us

Application

- ◆Ethernet - 10/100/1000 Base T
- ◆Cellular Phones
- ◆Handheld - Wireless Systems
- ◆Personal Digital Assistant (PDA)
- ◆USB Interface

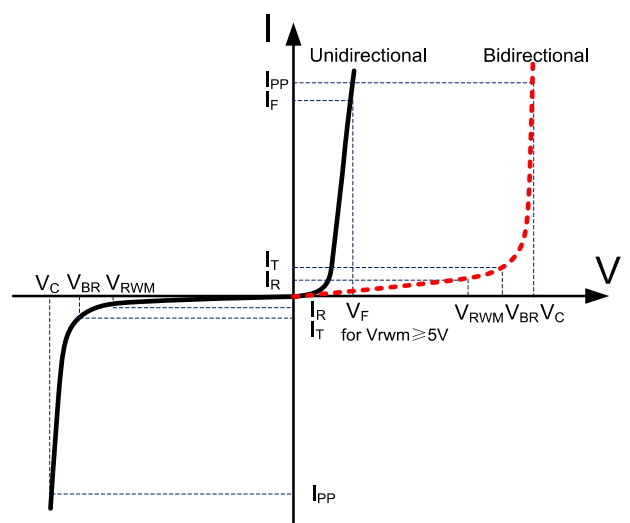


Limiting Values(TA = 25 °C, unless otherwise specified)

Symbol	Parameter	Conditions	value	Unit
P _{PP}	Peak Pulse Power (tp=8/20us)-See Figure 1	-	350	W
T _J	Operating Temperature	-	-55 to+150	°C
T _{stg}	Storage Temperature	-	-55 to+150	°C

Electrical Parameters (T=25°C)

Symbol	Parameter
I _{PP}	Maximum Peak Pulse Current
V _C	Clamping Voltage @ I _{PP}
V _{RWM}	Reverse Stand-Off Voltage
I _R	Reverse Leakage Current @ V _{RWM}
V _{BR}	Breakdown Voltage @ I _T
I _T	Test Current
I _F	Forward Current
V _F	Forward Voltage @ I _F



Electrical Characteristics

Part Number (See Note 1 Note 2)	Ratedstand-Off Voltage Vwm (Volts)	Minimum Breakdown Voltage @1ma Ver(Volts)	Maximum Clamping Voltage (See Fig.2) @IP=1A Vc(Volts)	Maximum Clamping Voltage (See Fig. 2) @8/20us Vc @IPP	Maximum Leakage Current @Vwm Ld(A)	Typical Capacitance @0v,1 Mhz C(Pf)
ESD3V3LD323	3.3	4.0	7.0	19.0V@ 20.0A	1	1
ESD3V3LBD323	3.3	4.0	7.0	19.0V @ 20.0A	1	1
ESD5VLD323	5.0	6.0	9.8	18.3V @ 17.0A	1	1
ESD5VLBD323	5.0	6.0	9.8	18.3V @ 17.0A	1	1
ESD8VLD323	8.0	8.5	13.4	18.5V @ 17.0A	1	1
ESD8VLBD323	8.0	8.5	13.4	18.5V @ 17.0A	1	1
ESD12VLD323	12.0	13.3	19.0	28.6V @ 11.0A	1	1
ESD12VLBD323	12.0	13.3	19.0	28.6V @ 11.0A	1	1
ESD15VLD323	15.0	16.7	24.0	31.8V @ 10.0A	1	1
ESD15VLBD323	15.0	16.7	24.0	31.8V @ 10.0A	1	1
ESD18VLD323	18.0	20.0	29.0	45.0V @ 8.0A	1	1
ESD18VLBD323	18.0	20.0	29.0	45.0V @ 8.0A	1	1
ESD24VLD323	24.0	26.7	43.0	56.0V @ 6.0A	1	1
ESD24VLBD323	24.0	26.7	43.0	56.0V @ 6.0A	1	1

Note 1: Part numbers with an additional "B" suffix are bidirectional devices, i.e..

Note 2:For Bidirectional Devices Only: Electrical characteristics apply in both directions.

Typical Characteristics

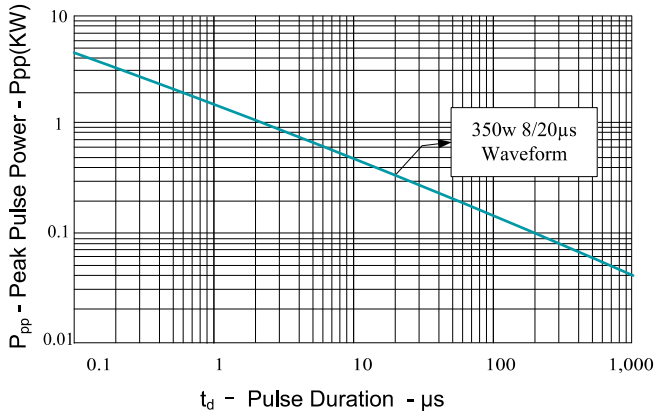


Fig.1 Peak Pulse Power vs. Pulse Time

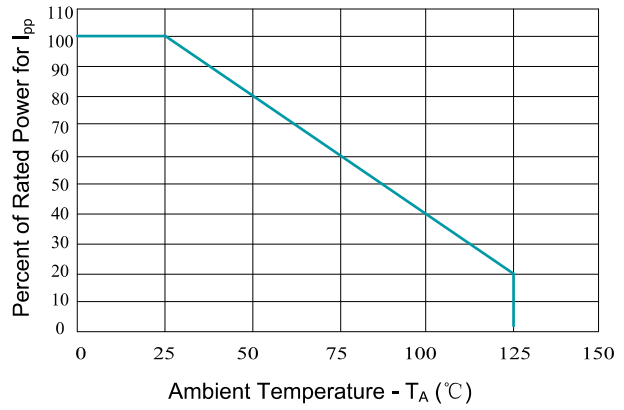


Fig 2: Power Derating curve

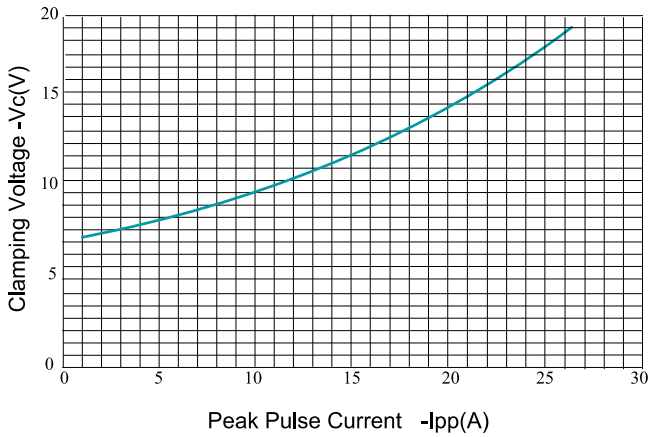


Fig 3: Clamping Voltage vs. Peak Pulse Current

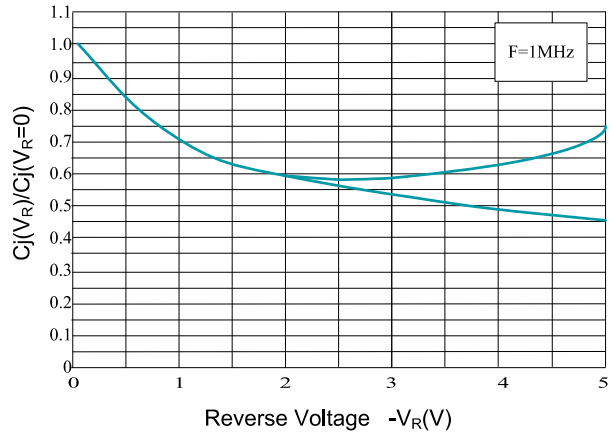


Fig 4: Normalized Junction Capacitance vs. Reverse Voltage

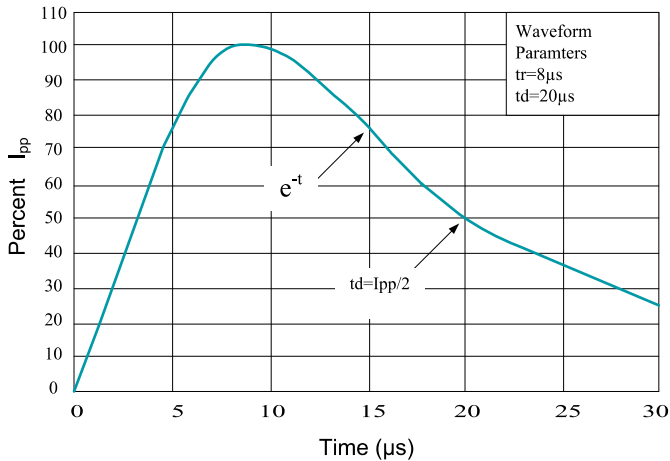


Fig 5: Pulse Waveform

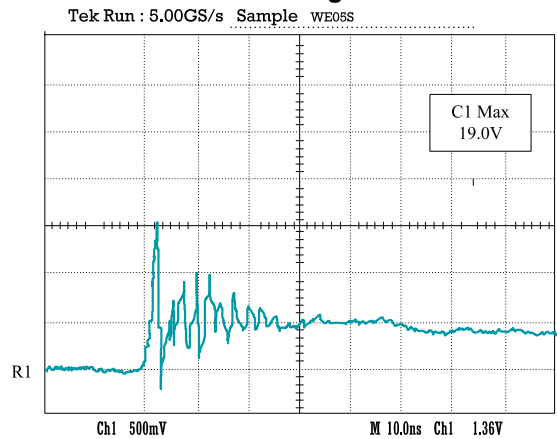


Fig 6: ESD Clamping(8kV Contact per IEC 61000-4-2)

PACKAGE OUTLINE		DIMENSIONS			
		PHOTO			
SYMBOL	MILLIMETER		INCHES		
	MIN	MAX	MIN	MAX	
A	1.60	1.90	0.063	0.075	
B	1.15	1.45	0.045	0.057	
C	2.39	2.70	0.094	0.106	
D	0.92	1.10	0.036	0.043	
E	0.25	0.40	0.010	0.016	
F	0.10	0.20	0.004	0.008	
H	-	0.10	-	0.004	

MOUNTING PAD	

Notes	
1. Controlling Dimensions in Millimeters.	
2. Dimensions are exclusive of mold flash and metal burrs.	

TAPE & REEL ORDERING NOMENCLATURE	
1. Surface mount product is taped and reeled in accordance with EIA-481.	