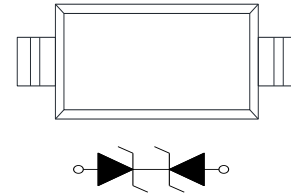


350W SMD ESD Device

Features

- For surface mounted applications
- Low-profile package suited for automatic installed
- Transient protection for data lines
- Compliance with IEC 61000-4-2(ESD) immunity test
Air Discharge: $\pm 30\text{kV}$
Contact Discharge: $\pm 30\text{kV}$



SOD-323

Main Applications

- Use in sensitive electronics protection

Mechanical Data

Case: SOD-323 molded plastic body

Terminal: Plated axial leads

Polarity: Color band denotes cathode end

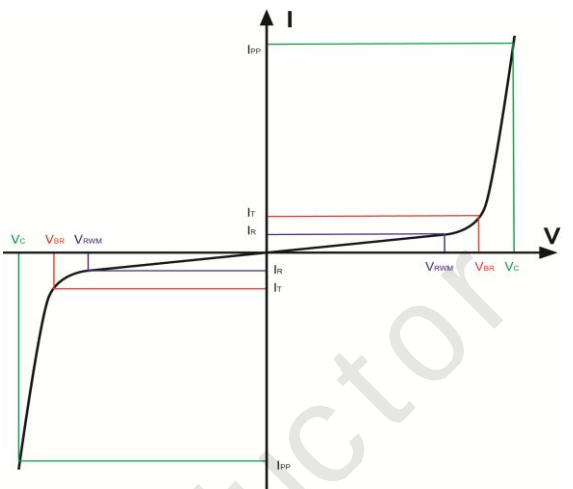
Absolute Maximum Ratings ($T_{\text{Ambient}}=25^{\circ}\text{C}$ unless noted otherwise)

Symbol	Description	Value	Unit
P_{PP}	Peak Pulse Power (8/20 μS)	350	Watt
I_{PP}	Peak Pulse Current (8/20 μS)	26	Amp
V_{ESD}	ESD Voltage per IEC61000-4-2(Air)	± 30	KV
	ESD Voltage per IEC61000-4-2(Contact)	± 30	
T_{L}	Maximum Lead Temperature for Soldering during 10s	260	$^{\circ}\text{C}$
T_{J}	Operating Temperature Range	-50 to +125	$^{\circ}\text{C}$
T_{STG}	Storage Temperature Range	-50 to +150	$^{\circ}\text{C}$

Electrical Characteristics ($T_{\text{Ambient}}=25^{\circ}\text{C}$ unless noted otherwise)

Symbol	Parameter	Condition	Min.	Typ.	Max.	Unit
V_{BR}	Breakdown Voltage	$I_{\text{T}}=1.0\text{mA}$	5.5	6.8	8.5	Volt
V_{RWM}	Reverse Working Voltage				5.0	Volt
I_{R}	Reverse Current	$V_{\text{R}}=5\text{V}$			1.0	μA
V_{C}	Clamping Voltage	@ $I_{\text{PP}}=7\text{A}$			7	Volt
		@ $I_{\text{PP}}=26\text{A}$			10.8	Volt
C_{T}	Junction Capacitance			65		pF

Symbol	Parameter
I_{PP}	Maximum Reverse Peak Pulse Current
V_C	Clamping Voltage@ I_{PP}
V_{RWM}	Reverse Working Voltage
I_R	Maximum Reverse Leakage Current
I_T	Test Current
V_{BR}	Breakdown Voltage@ I_T
I_F	Forward Current
V_F	Forward Voltage@ I_F
C_J	Junction Capacitance



Characteristics Curves

Fig 1. 8/20us Pulse Waveform

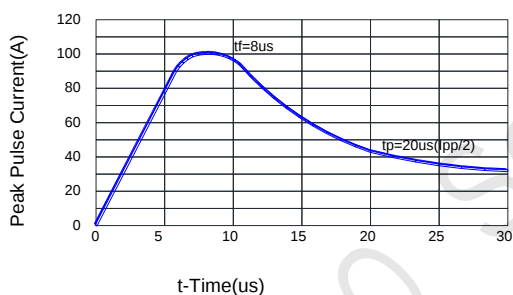


Fig 2. ESD Pulse Waveform (according to IEC 61000-4-2)

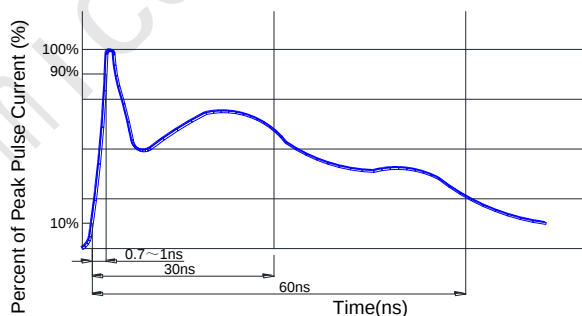


Fig 3. Power Derating Curve

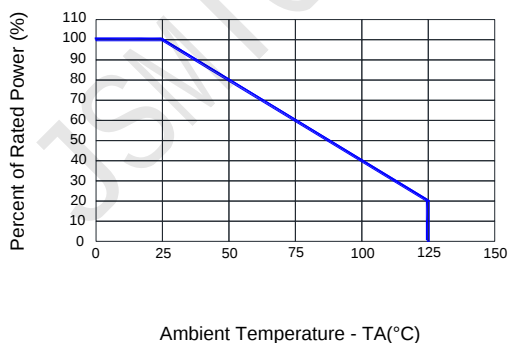
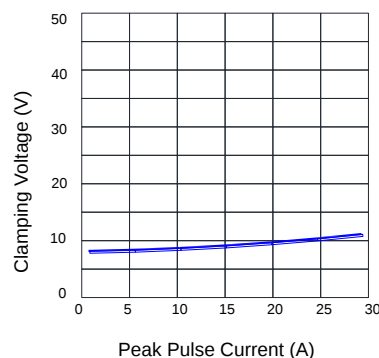
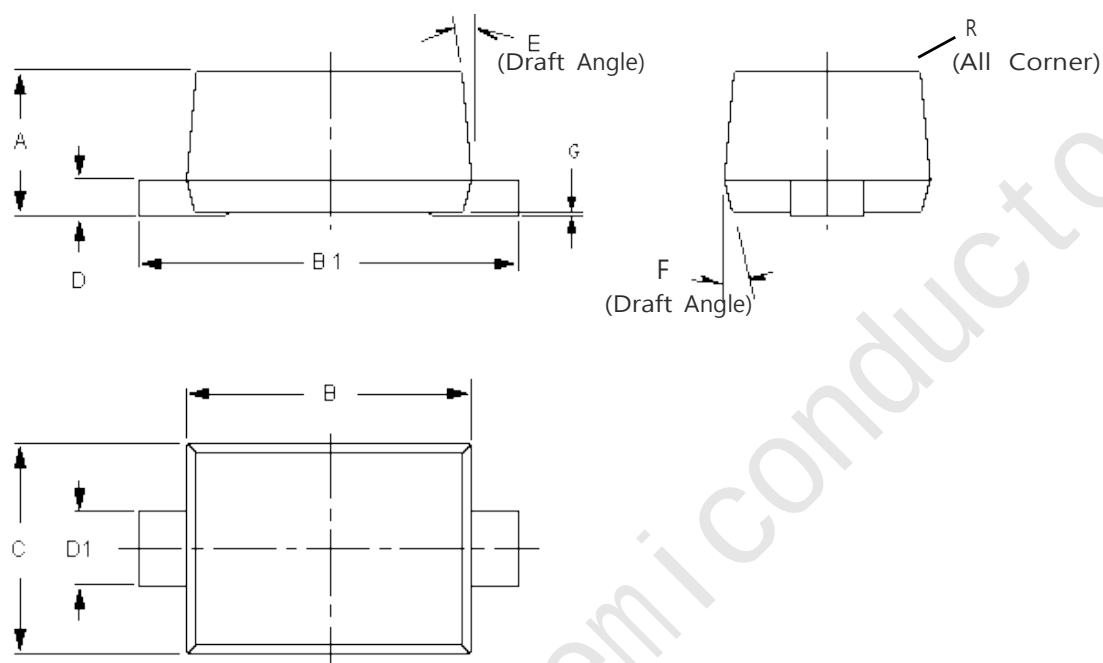


Fig 4. VC vs. IPP



PACKAGE OUTLINE

SOD-323 Package Outline



Symbol	Dim in mm		
	Min	Nom	Max
A	0.700	0.800	0.900
B	1.650	1.700	1.750
B1	2.550	2.600	2.750
C	1.250	1.300	1.350
D	0.090	0.100	0.110
D1	0.280	0.300	0.320
E	7°	8°	9°
F	9°	10°	11°
G	0.000	-	0.020
R	0.020	-	0.050

Mold Surface roughness: < 4μm