FESD5VM

High Current ESD Protection

Applications

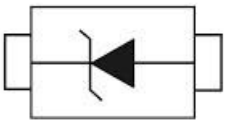
- Notebook
- Video
- Personal digital assistants
- MP3 Player
- Cellular handsets
- USB 2.0 Power and Data line Protection



SOD323

Feature

- With TVS Diode
- ESD Protection:Level 4
- Low clamping voltage
- 350 Watts peak pulse power per line(tp=8/20uS)
- Working Voltage:5 Volts
- Protection one line I/O port



Mechanical Characteristics

- Molded JEDEC SOD323 package
- Packging:Tape and Reel
- Flammability rating UL 94V-0

COSMOS WEALTH

IEC Compatibility

- EN61000-4
- 61000-4-2(ESD):Level 4,Contact:±8kv,Air::±15kv
- 61000-4-4(EFT):40A-5/50ns
- 61000-4-5(Surge):4A-8/20us

Device Characteristics

Maximum Ratings@25 unless otherwise specified			
Parameter	Symbol	Value	Units
Peak pulse power (tp=8/20us)	P_{PP}	350	Watts
Operating Temperature	T_J	-55℃~150℃	℃
Storage Temperature	T_{STG}	-55℃~150℃	℃

Electrical Characteristics

Parameter	Symbol	Condition	min	max	Units
Reverse Stand-off Voltage	V_{RWM}			5	V
Reverse Breakdown Voltage	$V_{BR(min)}$	I_Z=1mA Pin to Pin	6		V
Reverse Leakage Current	$I_{R(max)}$	@V_{RWM}		10	uA
Forward Voltage	$V_{F(max)}$	I_F=15mA		1.15	V
Clamping Voltage	V_C	I_{PP}=1A tp=8/20us		9.8	V
Peak Pulse Current	IPP	tp=8/20us		5	A
Junction Capacitance	$C_{I/O}$	Pin capacitance to GND.Vdc=0V,f=1MHZ		150	pf

Rating and characteristic curve

FIGURE 1
Power Derating Curve

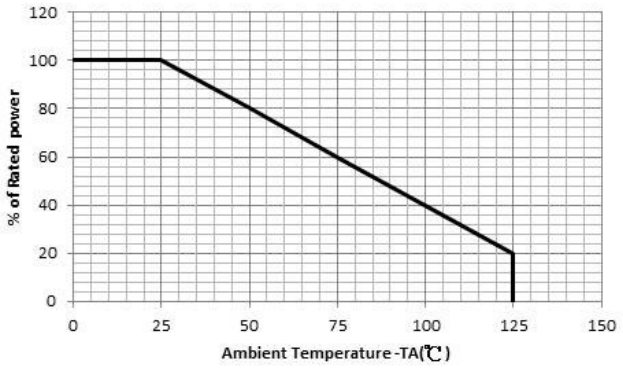
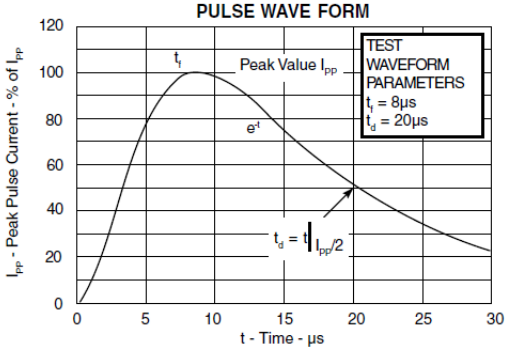
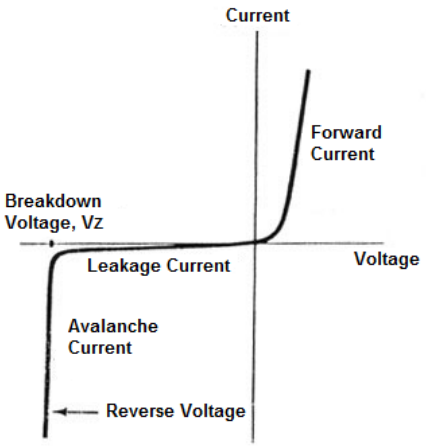


FIGURE 2
PULSE WAVE FORM

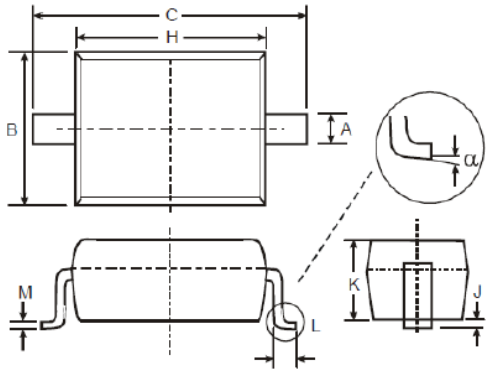


Electrical Characteristics (T = 25°C)

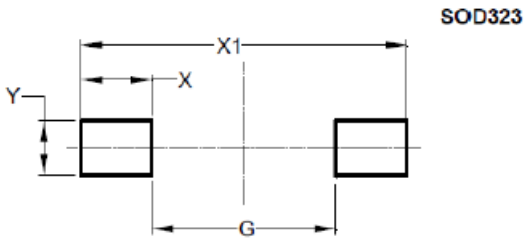
Symbol	Parameter
V_{RWM}	Nominal Reverse Working Voltage
I_R	Reverse Leakage Current @ V_{RWM}
V_{BR}	Reverse Breakdown Voltage @ I_T
I_T	Test Current for Reverse Breakdown
V_C	Clamping Voltage @ I_{PP}
I_{PP}	Maximum Peak Pulse Current
C_{ESD}	Parasitic Capacitance
V_R	Reverse Voltage
f	Small Signal Frequency



Ordering information



SOD323		
Dim	Min	Max
A	0.25	0.35
B	1.20	1.40
C	2.30	2.70
H	1.60	1.80
J	.00	0.10
K	1.0	1.1
L	0.20	0.40
M	0.10	0.15
α	0°	8°
All Dimensions in mm		



Dimensions	Value (in mm)
G	1.520
X	0.590
X1	2.700
Y	0.450

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