

ESD Diode

Features

- 2-pin lead-less package
- Junction capacitance (Typ value: 15pF)
- Peak Pulse current (8/20 μ s) Max:6A
- IEC61000-4-2 (ESD) $\pm$ 25kV (air), $\pm$ 20kV (contact)
- Low clamping voltage
- Low leakage current
- Working voltages:7V
- RoHS Compliant

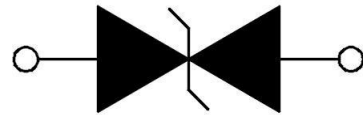
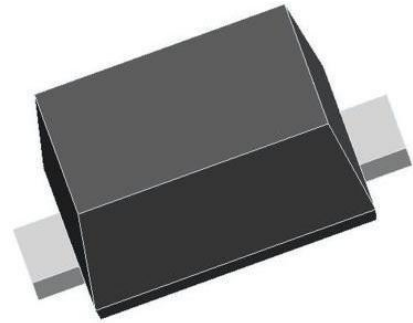
Mechanical Characteristics

- Package: SOD-523
- Lead Finish:Matte Tin
- Case Material: “Green” Molding Compound.
- UL Flammability Classification Rating 94V-0
- Moisture Sensitivity: Level 3 per J-STD-020
- Tape Reel :3000pcs

Applications

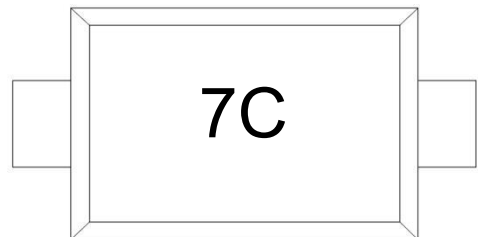
- Cellular Handsets and Accessories
- Personal Digital Assistants
- Notebooks and Handhelds
- Portable Instrumentation,Digital Cameras
- Peripherals, Audio Players, Industrial Equipment

Appearance & Symbol



Bi-directional

Marking Information



7C=Marking Code

Absolute Maximum Ratings (T=25°C, RH=45%-75%, unless otherwise noted)

Parameters	Symbol	Value	Unit
Peak Pulse Power (tp=8/20μs waveform)	P _{PP}	90	W
Peak Pulse Current (8/20μs)	I _{PP}	6	A
ESD per IEC 61000-4-2 (Air) ESD per IEC 61000-4-2 (Contact)	V _{ESD}	±25 ±20	KV
Operating Temperature Range	T _J	-55 to +125	°C
Storage Temperature Range	T _{stg}	-55 to +150	°C

Electrical Characteristics (T=25°C, RH=45%-75%, unless otherwise noted)

Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Reverse Working Voltage	V _{RWM}				7	V
Reverse Breakdown Voltage	V _{BR}	I _R = 1mA	7.5		9.5	V
Reverse Leakage Current	I _R	V _R = 7V			0.2	μA
Clamping voltage	V _C	I _{PP} = 1A, T _P =8/20us			9	V
Clamping voltage	V _C	I _{PP} = 6A, T _P =8/20us			14	V
Junction capacitance	C _J	V _R =0V, f =1MHz		15		pF

Typical Characteristics

FIG1: Power rating derating curve

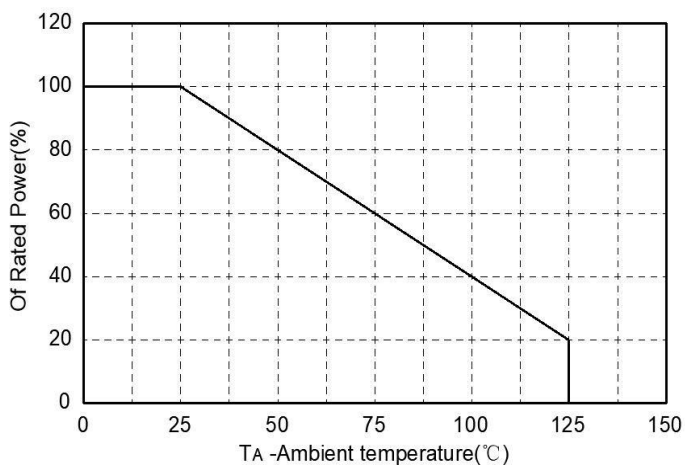


FIG2: pulse Waveform

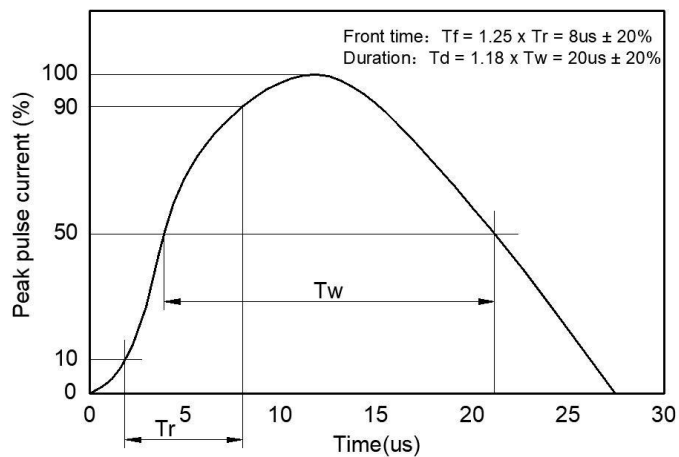


FIG3: Capacitance between teminals charateristics

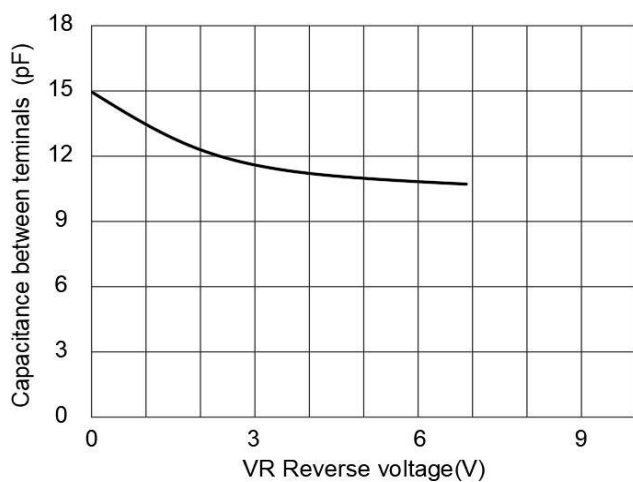
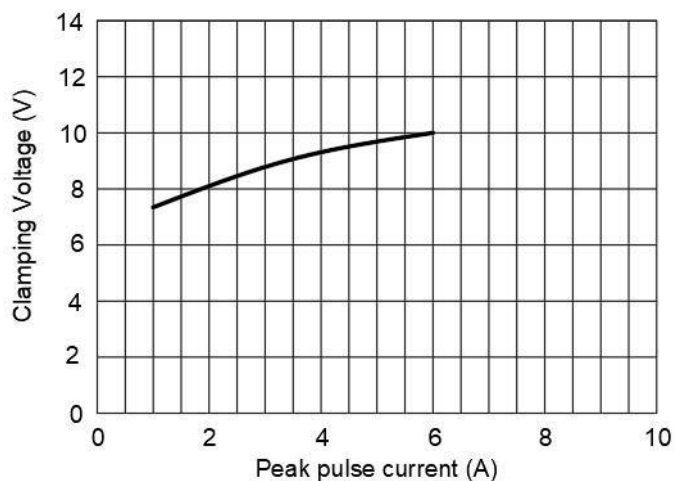
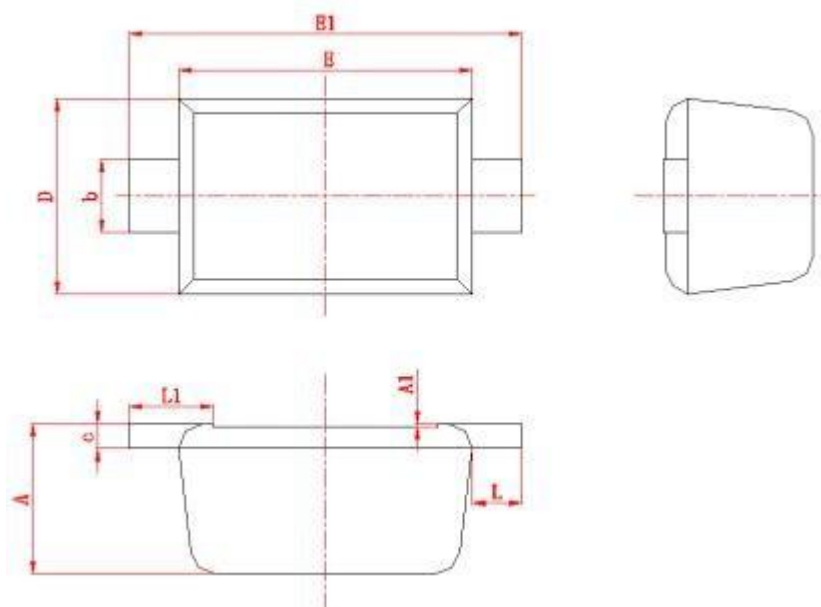


FIG4: Clamping Voltage vs. Peak Pulse Current

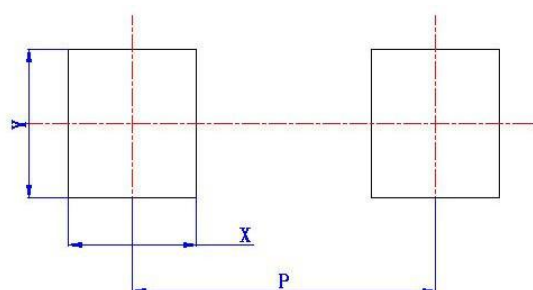


Package mechanical data



Symbol	Millimeters	
	Min.	Max.
A	0.50	0.70
A1	0	0.05
D	0.70	0.90
E	1.1	1.3
E1	1.5	1.7
b	0.25	0.35
c	0.08	0.15
L	0.12	0.28
L1	(0.3)	

Suggested Land Pattern



Symbol	Dimension in Millimeters
	Typ.
X	(0.6)
Y	(0.7)
P	(1.42)