

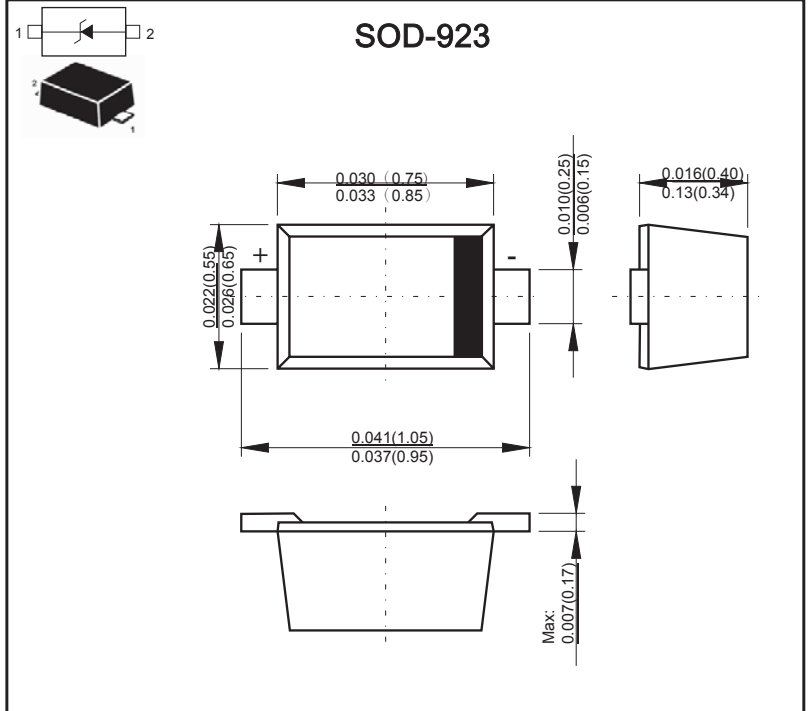
Electrostatic discharge Protection Devices(ESD)

FEATURES

- Reverse working(Stand-off) voltages:3.3V-12V
- Low leakage.
- Response time is typically<1ns.
- ESD Rating of Class 3(>16kV) per Human Body Model.
- IEC61000-4-2Level 4 ESD Protection.

APPLICATIONS

- Designed to protect voltage sensitive components from ESD and transient.
- Bi-directional micro-packaged diodes for ESD protection.
- Case style:SOD-523molded plastic



MAXIMUM RATINGS AND CHARACTERISTICS

@ 25°C Ambient Temperature (unless otherwise noted)

Rating	Symbol	Value	Unit
IEC 61000-4-2 (ESD)	Air Contact	±15	kV
	Contact discharge	±8	kV
ESD Voltage	Per Human Body Model	16	kV
Total Power Dissipation on FR-5 Board (Note 1) @ TA=25°C	PD	150	Mw
Junction and Storage Temperature Range	TJ,TSTG	-55 to 150	°C
Lead solder temperature range (10 Second Duration)	TL	260	°C

NOTE1. FR-5 = 1.0*0.75*0.62 in.

RATINGS AND CHARACTERISTIC CURVES

ELECTRICAL CHARACTERISTICS ($T_A=25^\circ\text{C}$ unless otherwise noted, $V_F=0.9\text{V}$ Max. @ $I_F=10\text{Ma}$ for all types)

Device	Marking	V_{RWM} (V)	I_R (μA) @ V_{RWM}	V_{BR} (V) @ I_T (Note 2)	I_T (mA)	I_{PP} (A) (Note 3)	V_C (V) @ Max I_{PP} (Note 3)	P_{PK} (W) (8*20 μs)	C (pF)
		Max	Max	Min		Max	Max	Typ	Typ
ESD9D3V3	E	3.3	2.5	5.0	1.0	9.8	10.1	102	80
ESD9D5V0	H	5.0	1.0	6.2	1.0	8.7	12.3	107	65
ESD9D12V	H	12	1.0	13.5	1.0	5.9	23.7	140	30
ESD9D5V0C	C	5.0	0.5	5.6	1.0	11.6	18.6	174	15
ESD9D3V3C	P	3.3	1.0	5.0	1.0	8.4	14.1	158	25

1. Other voltage available upon request.
2. V_{BR} is measured with a pulse test current I_T at an ambient temperature of 25°C
3. Surge current waveform per Figure 3.