

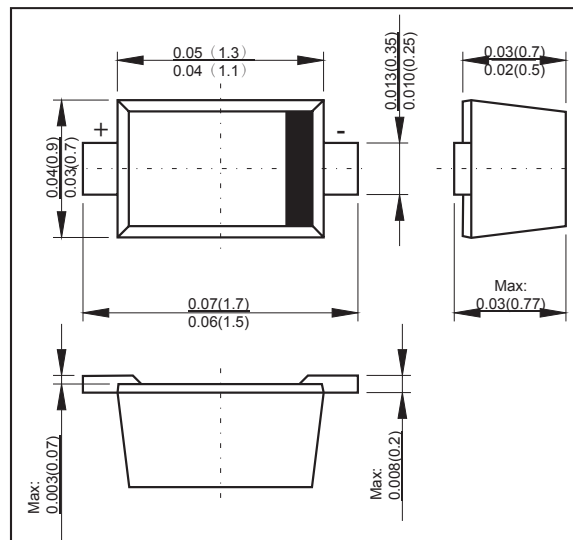
Electrolstatic discharge Protection Devices(ESD)

FEATURES

- Reverse working(Stand-off) voltages:2.5V-12V
- Low leakage
- Response time is typically<1ns.
- ESD Rating of Class 3(>16kV) per Human Body Model
- IEC61000-4-2Level 4 ESD Protection

MECHANICAL DATA

- Designed to protect voltage sensitive components from ESD and transient
- Case style:SOD-523molded plastic



MAXIMUM RATINGS AND CHARACTERISTICS

@ 25°C Ambient Temperature (unless otherwise noted)

Parameters	Symbol	Value	Unit
ESD per IEC61000-4-2(Air) ESD per IEC61000-4-2(Contact)	V _{ESD}	±30	kV
IEC 61000-4-4(EFT)		40	A
ESD Voltage	Per Human Body Model Per Machine Model	16 400	kV v
Total Power Dissipation on FR-5 Board (note 1)@Ta=25°C	P _{PP}	200	W
Operating temperature	T _{OPT}	-55 ~ +150	°C
Storage temperature range	T _{STG}	-55 ~ +150	°C
Lead Soldering temperature-Maximum (10 second Duration)	T _L	260(10 sec)	°C

Electrical Characteristics (Ta= 25°C unless otherwise noted, VF=0.9V Max.@ IF=10mA for all types)

DEVICE	DEVICE MARKING	VRWM (V) (max.)	IR(μA) @VRWM (max.)	VBR(V) @IT(note2) (min.)	IT (mA)	Vc@5A (V) (Typ.)	Vc (V) (max.) (@A)	Ppk (W) (max.)	C (pF) (Typ.)
ESD5Z2.5	ZD	2.5	6.0	4.0	1.0	6.5	10.9 11.0	120	145
ESD5Z3.3	ZE	3.3	0.05	5.0	1.0	8.4	14.1 11.2	158	105
ESD5Z5.0	ZF	5.0	0.05	6.2	1.0	11.6	18.6 9.4	174	80
ESD5Z6.0	ZG	6.0	0.01	6.8	1.0	12.4	20.5 8.8	181	70
ESD5Z7.0	ZH	7.0	0.01	7.5	1.0	13.5	22.7 8.8	200	65
ESD5Z12	ZM	12	0.01	14.1	1.0	17	25 9.6	240	55

RATINGS AND CHARACTERISTIC CURVES

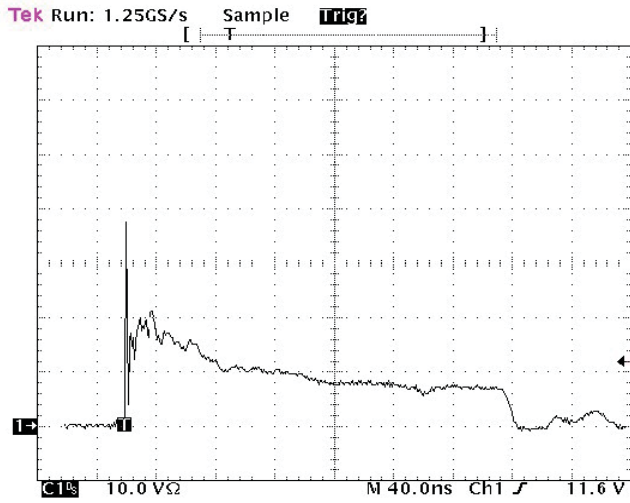


Figure 2. Positive 8 kV contact per IEC 6100-4-2
- ESD5Z5.0T1G

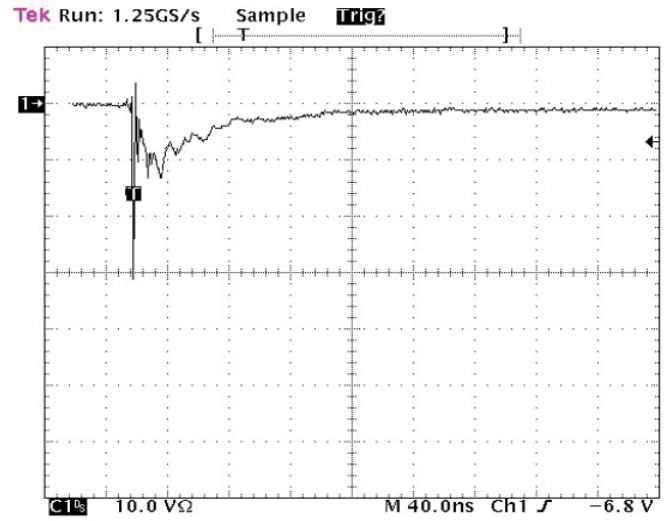


Figure 3. Negative 8 kV contact per IEC 6100-4-2
- ESD5Z5.0T1G

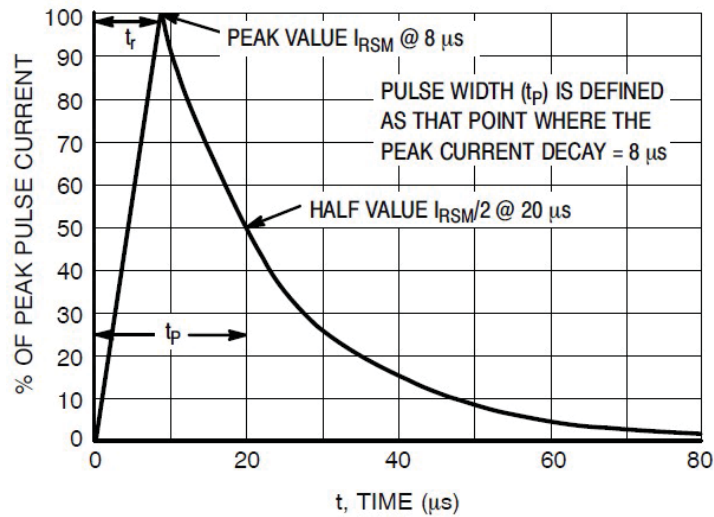


Figure 1. 8 x 20 μ s Pulse Waveform