

Electrostatic discharge Protection Devices(ESD)

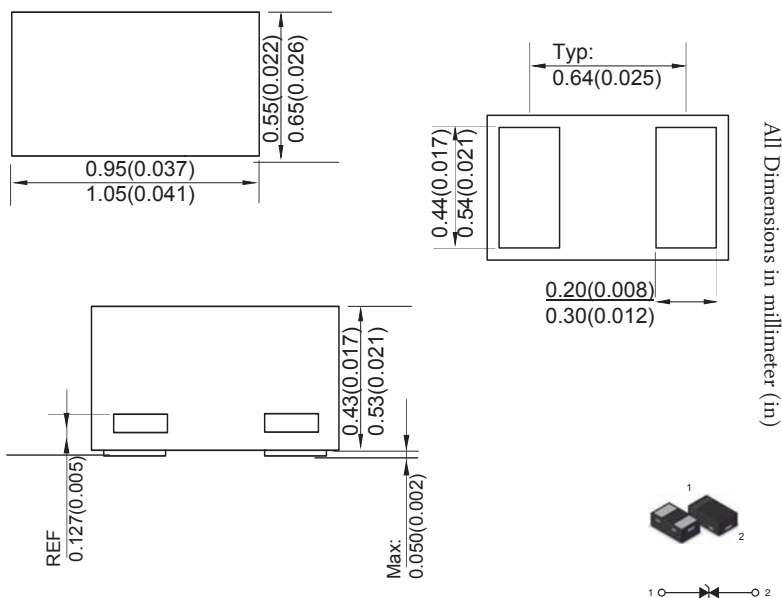
FEATURES

- Low Leakage
- Response Time is Typically < 1 ns
- ESD Rating of Class 3 (> 16 kV) per Human Body Model
- IEC61000-4-2 Level 4 ESD Protection
- These are Pb-Free Devices
- We declare that the material of product
- compliance with RoHS requirements.

MECHANICAL DATA

- Designed to protect voltage sensitive components from ESD and transient.
- Case style:SOD-882molded plastic

SOD-882



MAXIMUM RATINGS AND CHARACTERISTICS

@ 25°C Ambient Temperature (unless otherwise noted)

Rating	Symbol	Value	Unit
IEC 61000-4-2 (ESD) Air discharge		±25	kV
Contact discharge		±20	kV
ESD Voltage Per Human Body Model		16	kV
Total Power Dissipation on FR-5 Board (Note 1) @ T _A =25°C	PD	200	mW
Junction and Storage Temperature Range	T _J ,T _{STG}	-55 to 150	°C
Lead Solder Temperature – Maximum (10 Second Duration)	TL	260	°C

Stresses exceeding Maximum Ratings may damage the device. Maximum Rating are stress ratings only. Functional operation above the Recommended Operating Conditions is not implied. Extended exposure to stresses above the Recommended Operating Conditions may affect device reliability.

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

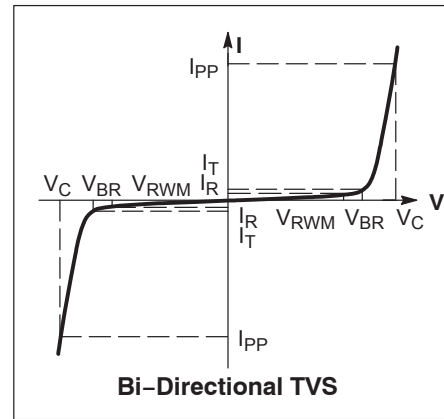
Ordering information

Device	Marking	Shipping
ESD8D3.3CAT5G	BK	10000/Reel

RATINGS AND CHARACTERISTIC CURVES

ELECTRICAL CHARACTERISTICS (TA = 25°C unless otherwise noted)

Symbol	Parameter
I_{PP}	Maximum Reverse Peak Pulse Current
V_C	Clamping Voltage @ I_{PP}
V_{RWM}	Working Peak Reverse Voltage
I_R	Maximum Reverse Leakage Current @ V_{RWM}
V_{BR}	Breakdown Voltage @ I_T
I_T	Test Current
P_{pk}	Peak Power Dissipation
C	Capacitance @ $V_R = 0$ and $f = 1.0$ MHz



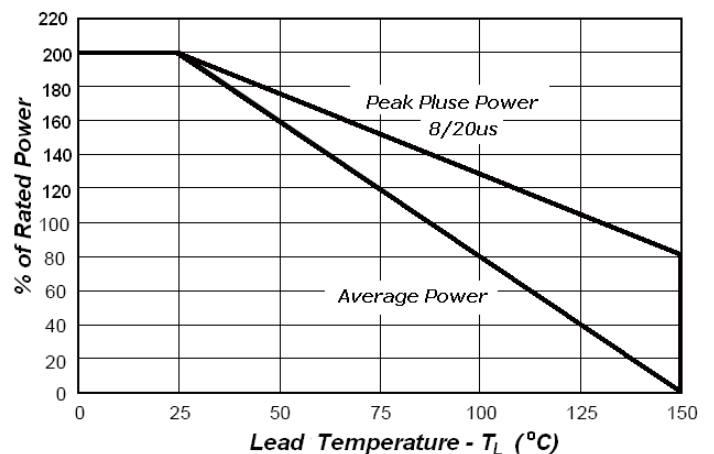
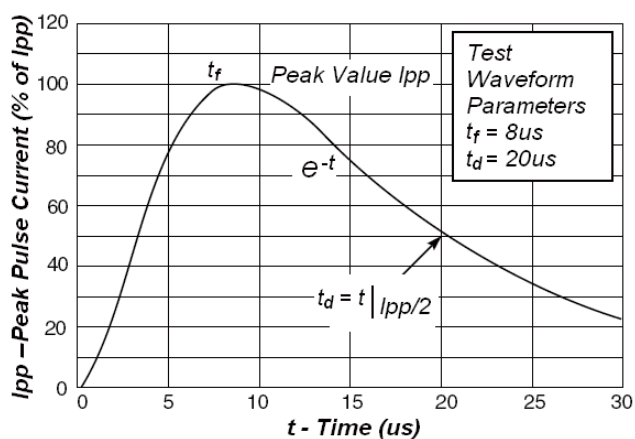
ELECTRICAL CHARACTERISTICS

Device	V_{RWM} (V)	I_R (μA) @ V_{RWM}	V_{BR} (V) @ I_T (Note 2)		I_T	V_C (V) @ $I_{PP} = 1$ A (Note 3)	V_C (V) @ MAX I_{PP} (Note 3)	I_{PP} (A) (Note 3)	P_{PK} (W) (Note 3)	C (pF) $V_R = 0V, f = 1MHz$		
	Max	Max	Min	Max	mA	Max	Max	Max	Max	Min	Typ	Max
ESD8D3.3CAT5G	3.3	0.1	5.0	6.5	1.0	7	10	6	60	8	12	16

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 1.



RATINGS AND CHARACTERISTIC CURVES

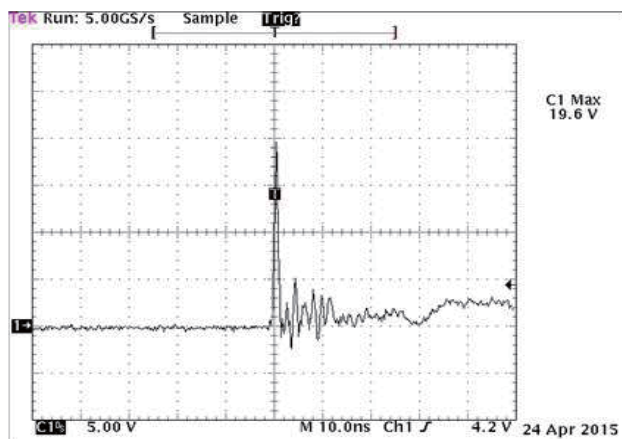


Fig3.Positive 8 kV Contact per IEC61000.4.2

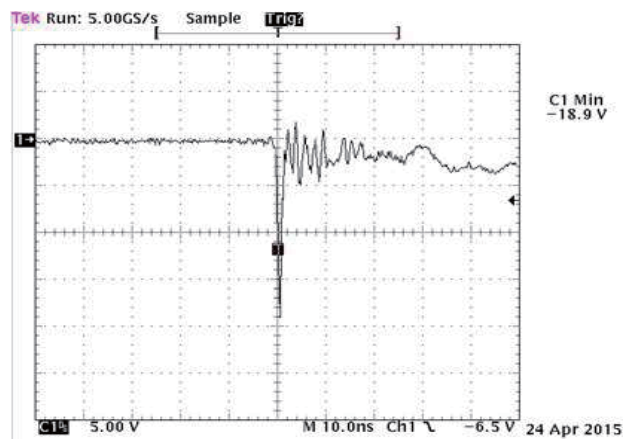


Fig4.Negative 8 kV Contact per IEC61000.4.2

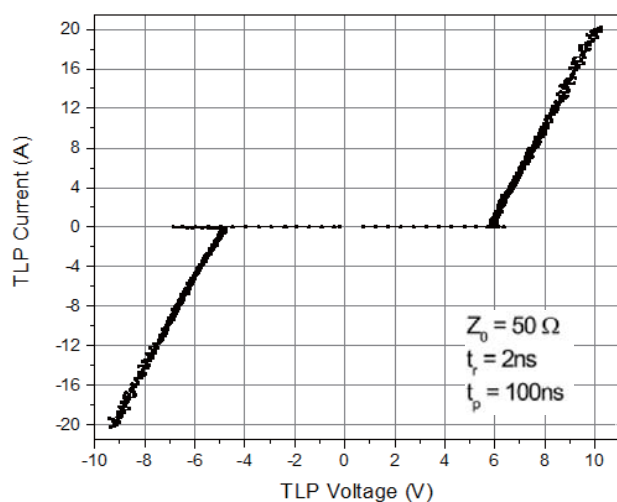


Fig5.TLP Measurement