

■ **FEATURES**

- Bi-Directional Transient Voltage Suppressor
- Low capacitance and Low Leakage
- ESD Protection, IEC61000-4-2 Level 4
- SOD523 Thin SMD
- RoHS compliant
- UL-94 V-0 / Green EMC
- Matte Tin Lead finish (Pb-Free)

Device Marking Code	
ESDB5.0CM5	5C

■ **MAXIMUM RATINGS** ($T_a=25^\circ\text{C}$ Unless otherwise specified)

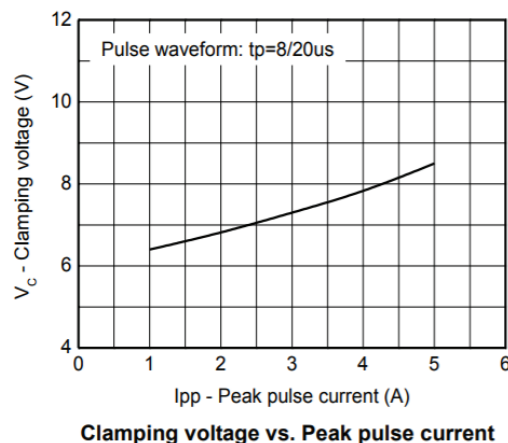
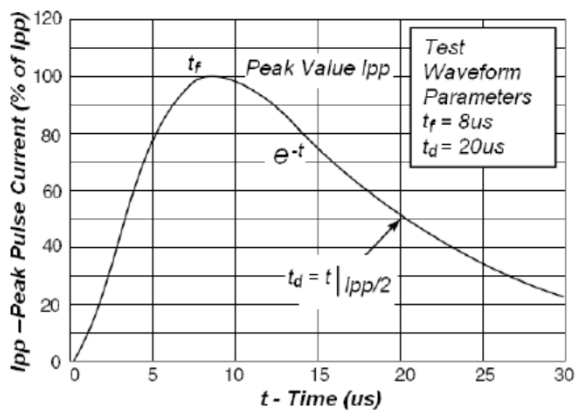
Symbol	Parameter	Value	Units
$I_{PP *1}$	Maximum Reverse Peak Pulse Current	5.0*1	A
$V_{ESD-Air}$	ESD Voltage IEC61000-4-2 Air	± 15	kV
$V_{ESD-contact}$	ESD Voltage IEC61000-4-2 Contact	± 8	kV
T_J	Junction Temperature	150	$^\circ\text{C}$
T_{STG}	Storage Temperature	-55 to +150	$^\circ\text{C}$
P_D	Power Dissipation	200	mW

*1 $t_p = 8/20 \mu\text{s}$

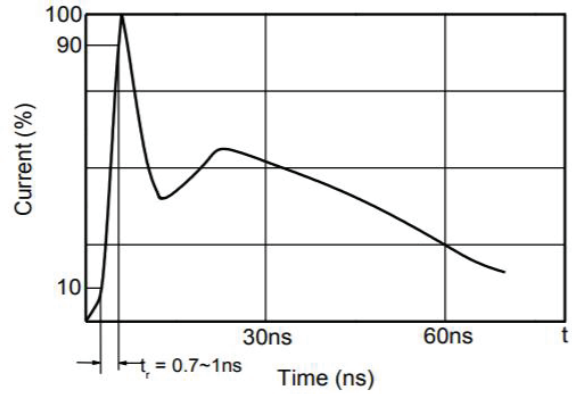
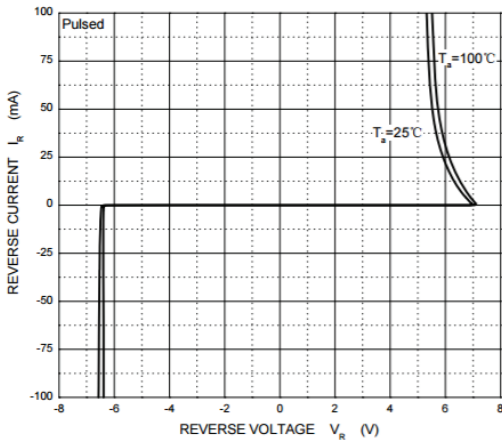
■ **ELECTRICAL CHARACTERISTICS** ($T_a=25^\circ\text{C}$ Unless otherwise specified)

Symbol	Parameter	Conditions	Min	Typ	Max	Units
V_{RWM}	Reverse Working Peak Voltage	-			5.0	V
V_{BR}	Reverse Breakdown Voltage Pin 1 to 2	$I_T = 1\text{mA}$	5.6		8.2	V
I_R	Reverse Current	$V_{RWM} = \pm 5\text{V}$			1.0	μA
V_C	Clamping Voltage	$I_{pp}=1\text{A}$			8	V
V_C	Clamping Voltage	$I_{pp}=5\text{A}$			11	V
C_D	Diode Capacitance	$V_R = 0\text{V}, f = 1\text{MHz}$		13		pF

■ **CHARACTERISTICS (TYPICAL)**

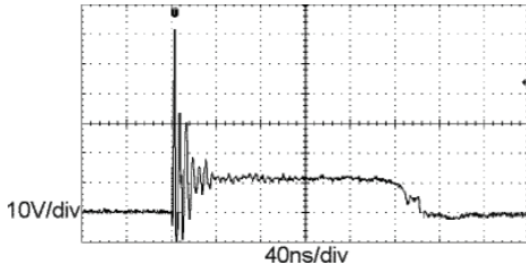


Pulse Waveform

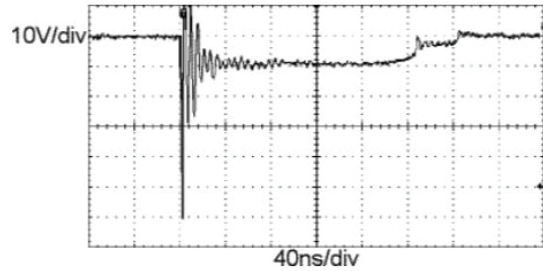


Contact discharge current waveform per IEC61000-4-2

Reverse Characteristics



ESD clamping
(+8kV contact discharge per IEC61000-4-2)



ESD clamping
(-8kV contact discharge per IEC61000-4-2)

■ SUGGESTED PAD LAYOUT

