



Micro Commercial Components



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ESD5V0LB

Features

- Ultra low leakage: nA level
Low operating Voltage: 5.0 V
Low clamping voltage
IEC61000-4-4 (EFT) 40A (5/50ns)
IEC61000-4-5(Lightning) 25A (8/20us)
Epoxy meets UL 94 V-0 flammability rating
Moisture Sensitivity Level 1
Halogen free available upon request by adding suffix "-HF"
Marking:B8

Maximum Ratings

- unction Temperature: -55°C to +125°C
Storage Temperature: -55°C to +150°C

Table with 5 columns: Parameter, Symbol, Limits, unit. Rows include IEC61000-4-2(ESD) Contact Air, Peak Pulse Power (8/20us), and Peak Pulse Current (8/20us).

Internal Structure



ESD Protection Device

DFN1006-2

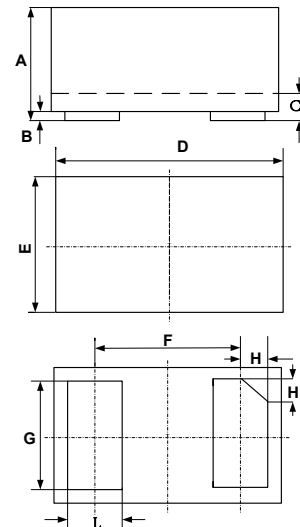
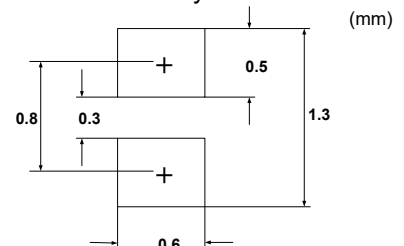


Table titled DIMENSIONS with columns for DIM, INCHES (MIN, MAX), MM (MIN, MAX), and NOTE. It lists dimensions A through L with their respective values.

Suggested Solder Pad Layout

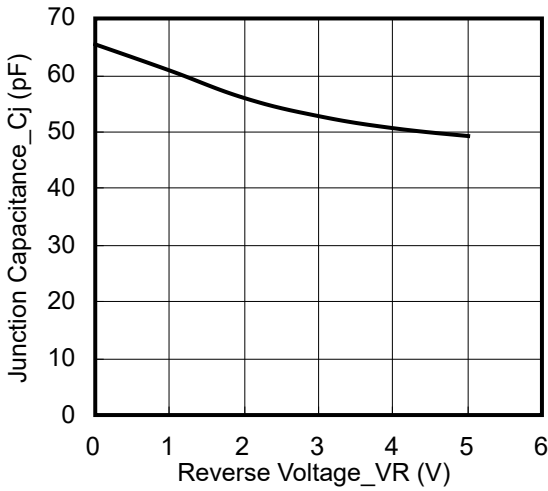


# ESD5V0LB

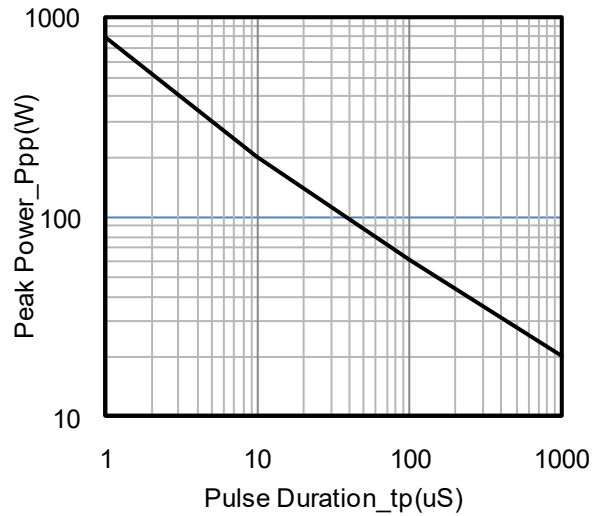
## ELECTRICAL CHARACTERISTICS( $T_a=25^{\circ}\text{C}$ unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Reverse stand off voltage	$V_{RWM}$				5.0	V
Reverse leakage current	$I_R$	$V_{RWM}=5.0\text{V}$			0.5	$\mu\text{A}$
Breakdown voltage	$V_{(BR)}$	$I_T=1\text{mA}$	6.0	8.0	9.0	V
Clamping voltage	$V_C$	$I_{PP}=1\text{A}$			7	V
Clamping voltage	$V_C$	$I_{PP}=25\text{A}$			16	V
Junction capacitance	$C_J$	$V_R=0\text{V}, f=1\text{MHz}$		80	100	pF

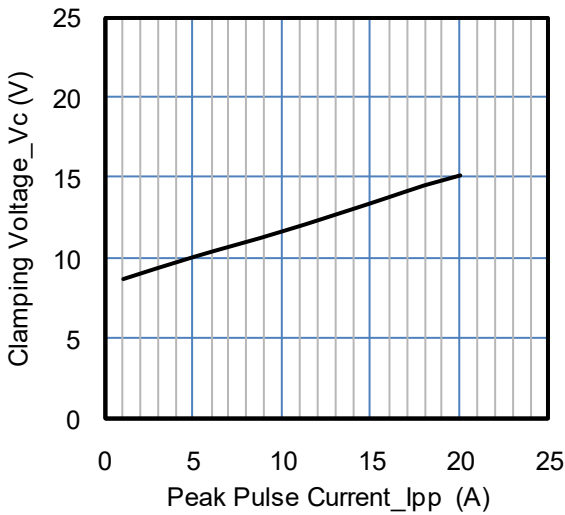
**Typical Performance Characteristics (TA=25°C unless otherwise Specified)**



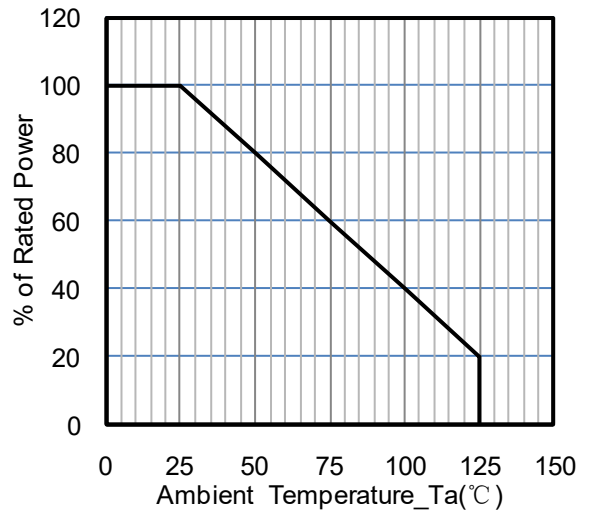
**Junction Capacitance vs. Reverse Voltage**



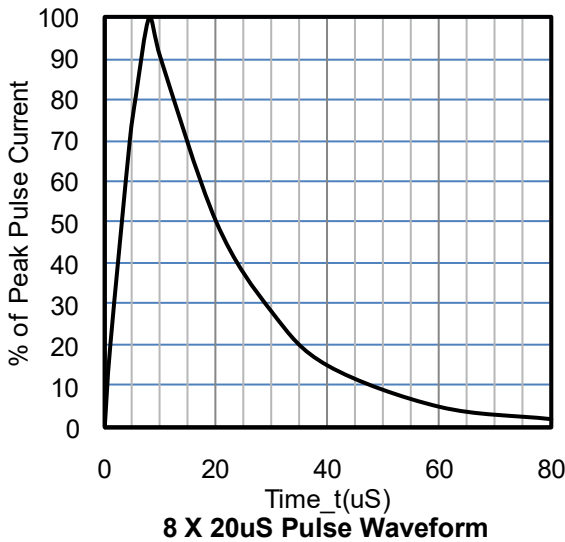
**Peak Pulse Power vs. Pulse Time**



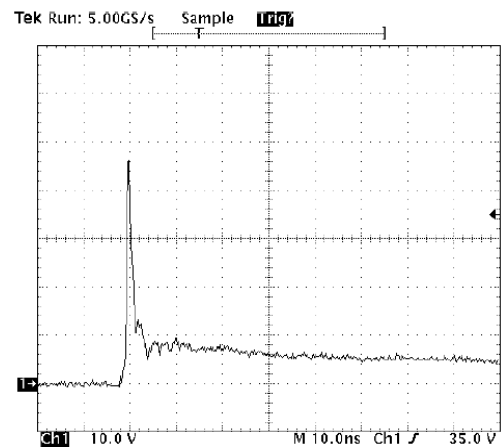
**Clamping Voltage vs. Peak Pulse Current**



**Power Derating Curve**



**8 X 20uS Pulse Waveform**



**ESD Clamping Voltage**

**8 kV Contact per IEC61000-4-2**



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### Ordering Information :

Device	Packing
Part Number-TP	Tape&Reel: 10Kpcs/Reel

Note : Adding "-HF" suffix for halogen free, eg. Part Number-TP-HF

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