



## 1- Line, Bi-directional, Ultra-low Capacitance Transient Voltage Suppressor

### Features

Stand-off voltage: 5V Max  
Transient protection for each line according to  
IEC61000-4-2(ESD):  $\pm 15\text{kV}$  (contact)  
IEC61000-4-5(surge): 4A (8/20 $\mu\text{s}$ )  
Ultra-low capacitance:  $C_J = 0.35\text{pF}$  typ  
Ultra-low leakage current:  $I_R < 1\text{nA}$  typ.  
Low clamping voltage Package

**Terminals:** Tin plated leads, solderable per  
J-STD-002 and JESD22-B102

**Polarity:** Cathode line denotes the cathode end

**Marking:** 5U

### Definitions of Electrical Characteristics



## ESDULC5V0LBS

### Maximum Ratings

PARAMETER	SYMBOL	Rating	UNIT
Peak pulse power ( $t_p = 8/20\mu s$ )	$P_{pk}$	48	W
Peak pulse current ( $t_p = 8/20\mu s$ )	$I_{PP}$	4	A
ESD according to IEC61000-4-2 air discharge	$V_{ESD}$	$\pm 15$	KV
ESD according to IEC61000-4-2 contact discharge		$\pm 15$	KV
Junction temperature	$T_J$	125	$^{\circ}C$
Operating temperature	$T_{OP}$	-40~85	$^{\circ}C$
Storage temperature	$T_{STG}$	-55~150	$^{\circ}C$

### Electrical Characteristics $T_a=25$

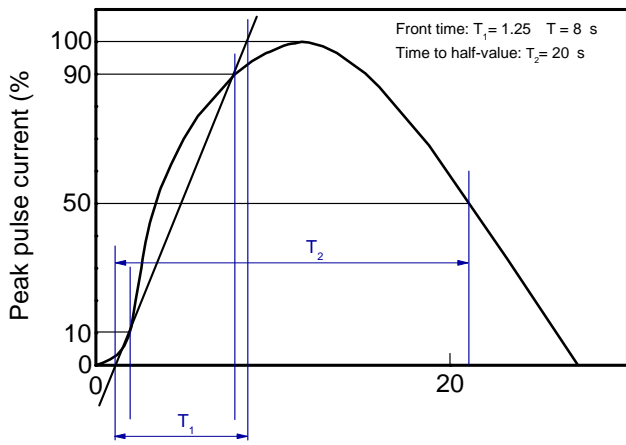


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## Characteristics (Typical)

820µs waveform per IEC61000 4 5

Contact discharge current waveform per IEC61000 4 2



Clamping voltage vs. Peak pulse current

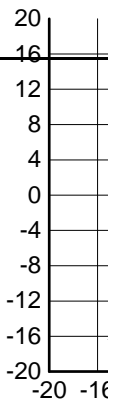
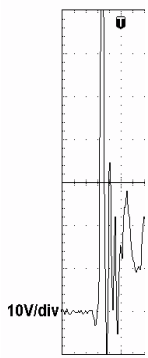
Capacitance vs. Reverse voltage

Non repetitive peak pulse power vs. Pulse time

Power derating vs. Ambient temperature



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**Outline Dim**

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v 5HFRPPHQQ ODQG SDWWHUQ 8QLW PP



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