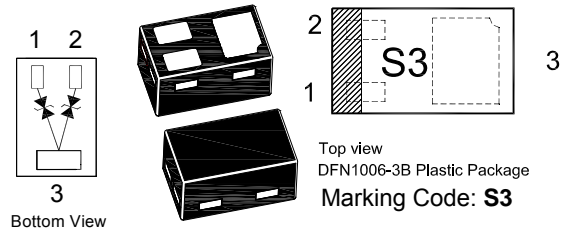


ESDB5V0ABP

Transient Voltage Suppressors

Features

- Low leakage current
- Low clamping voltage



Absolute Maximum Ratings ($T_a = 25^\circ\text{C}$)

Parameter	Symbol	Value	Unit
Peak Pulse Power ($t_p = 8/20 \mu\text{s}$)	P_{PK}	99	W
Peak Pulse Current ($t_p = 8/20 \mu\text{s}$)	I_{PP}	9	A
IEC61000-4-2 (ESD) Air Contact	V_{PP}	± 30 ± 30	KV
Operating Temperature Range	T_{opr}	- 40 to + 85	$^\circ\text{C}$
Junction Temperature	T_j	125	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	- 55 to + 150	$^\circ\text{C}$

Characteristics at $T_a = 25^\circ\text{C}$

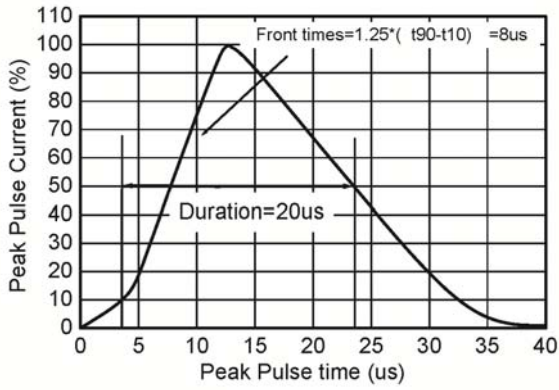
Parameter	Symbol	Min.	Max.	Unit
Reverse Maximum Working Voltage	V_{RWM}	-	5	V
Reverse Breakdown Voltage at $I_R = 1 \text{ mA}$	$V_{(BR)R}$	5.8	8.1	V
Reverse Current at $V_{RWM} = 1.8 \text{ V}$ at $V_{RWM} = 5 \text{ V}$	I_R	- -	20 1	nA μA
Clamping Voltage at $I_{PP} = 1 \text{ A}$, $t_p = 8/20 \mu\text{s}$ at $I_{PP} = 9 \text{ A}$, $t_p = 8/20 \mu\text{s}$	V_C	- -	6 11	V
Junction Capacitance at $V_R = 0 \text{ V}$, $f = 1 \text{ MHz}$	C_j	-	30	pF

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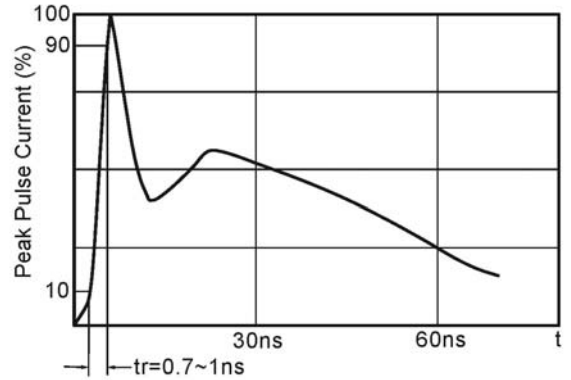


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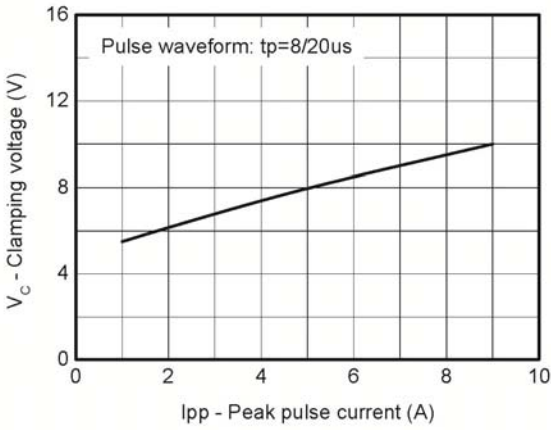
ESDB5V0ABP



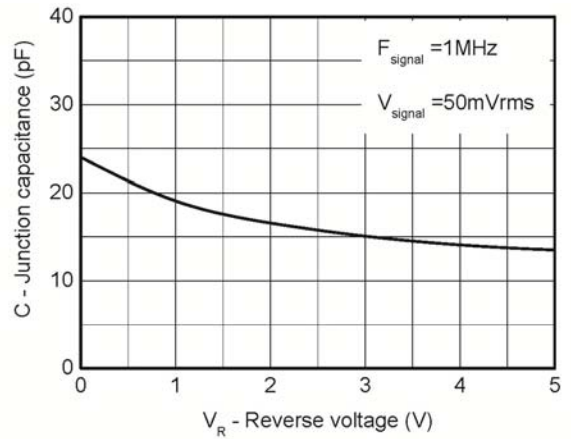
8/20us waveform



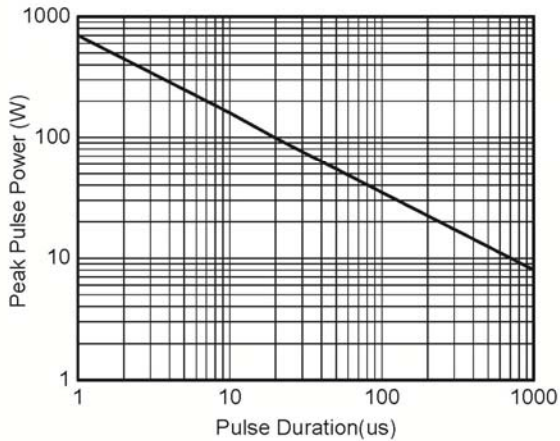
IEC61000-4-2 waveform



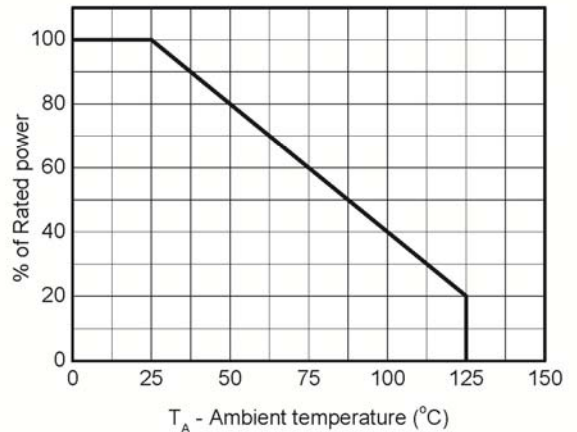
Clamping voltage vs. Peak pulse current



Capacitance vs. Revers voltage



Non-Repetitive Peak Pulse Power vs. Pulse time



Power derating vs. Temperature

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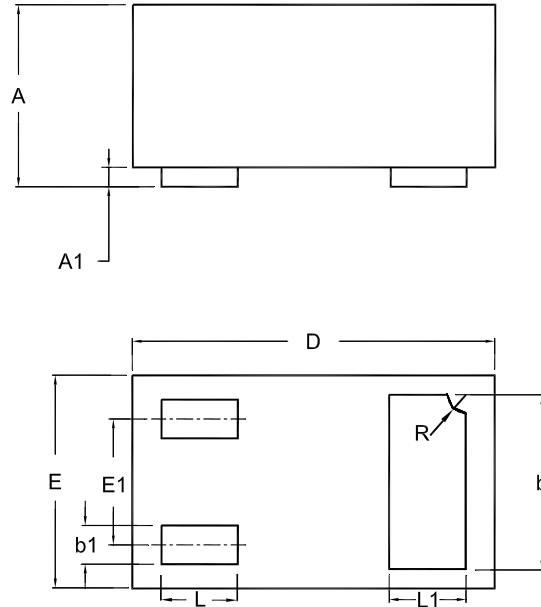


ESDB5V0ABP

PACKAGE OUTLINE

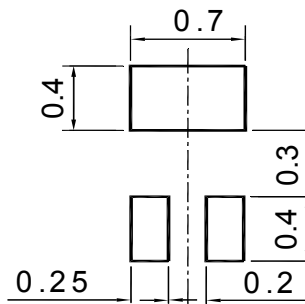
Plastic surface mounted package

DFN1006-3B



UNIT	A	A1	b	b1	D	E	E1	L	L1	R
mm	0.40 0.36	0.05 0	0.55 0.45	0.2 0.1	1.05 0.95	0.65 0.55	0.325	0.3 0.2	0.3 0.2	0.15 0.05

Recommended Soldering Footprint



Packing information

Package	Tape Width (mm)	Pitch		Reel Size		Per Reel Packing Quantity
		mm	inch	mm	inch	
DFN1006-3B	8	4 ± 0.1	0.157 ± 0.004	178	7	5,000

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