



PJEC5V0V3FN2B

Very Low Capacitance TVS/ESD Protection

V_{RWM}

5 V

Features

- Bidirectional ESD protection of one line
- IEC61000-4-2(ESD): ±15kV Air, ±8kV Contact Compliance
- IEC61000-4-4(EFT): 20A(5/50nS)
- IEC61000-4-5(Lightning): 2A(8/20μS)
- Low leakage current, maximum of 0.5μA at rated voltage
- Lead free in compliance with EU RoHS 2011/65/EU directive.
- Green molding compound as per IEC61249 Std.
(Halogen Free)

Mechanical Data

- Case: DFN0603, Plastic
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 0.00001 ounces, 0.00028 grams
- Marking: O

Applications

- Mobile Phones and accessories
- Desktops, Servers and Notebook
- Hand held portable
- Digital Cameras
- Computer Interfaces Protection
- Serial and Parallel Ports Protection
- Control Signal Lines Protection

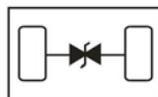
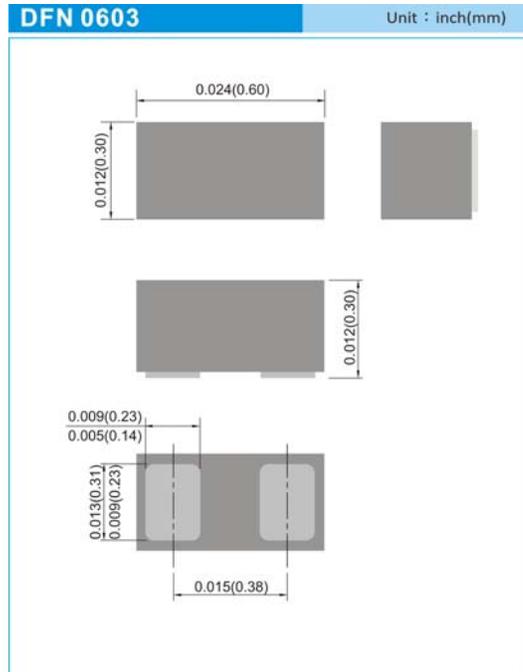


Fig.187(Top View)



Maximum Ratings (T_A=25°C unless otherwise noted)

PARAMETER	SYMBOL	LIMIT	UNITS
ESD IEC61000-4-2(Air)	V _{ESD}	±15	kV
ESD IEC61000-4-2(Contact)		±8	
Operating Junction Temperature	T _J	-55 to +125	°C
Storage Temperature Range	T _{STG}	-55 to +150	°C



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Electrical Characteristics ($T_A=25^{\circ}\text{C}$ unless otherwise noted)

PARAMETER	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNITS
Reverse Stand-Off Voltage	V_{RWM}	-	-	-	5	V
Reverse Breakdown Voltage	V_{BR}	$I_{BR}=1\text{mA}$	5.5	-	10	V
Reverse leakage current	I_R	$V_R=5\text{V}$	-	-	0.5	μA
Clamping Voltage	V_{CL}	$I_{PP}=1\text{A}, t_p=8/20\mu\text{s}$			12	V
		$I_{PP}=2\text{A}, t_p=8/20\mu\text{s}$	-	-	15	
Clamping Voltage TLP ^(Note 1)	V_{CL}	$I_{PP}=4\text{A}, t_p=100\text{ns}$	-	9.5	-	V
		$I_{PP}=8\text{A}, t_p=100\text{ns}$	-	11.5	-	
Dynamic Resistance ^(Note 1)	R_{DYN}	$t_p=100\text{ns}$	-	0.5	-	Ω
Off State Junction Capacitance	C_J	0Vdc Bias $f=1\text{MHz}$	-	-	3.5	pF

NOTES :

1. Testing using Transmission Line Pulse (TLP) conditions: $Z_0 = 50\Omega$, $t_p = 100\text{ ns}$.



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TYPICAL CHARACTERISTIC CURVES

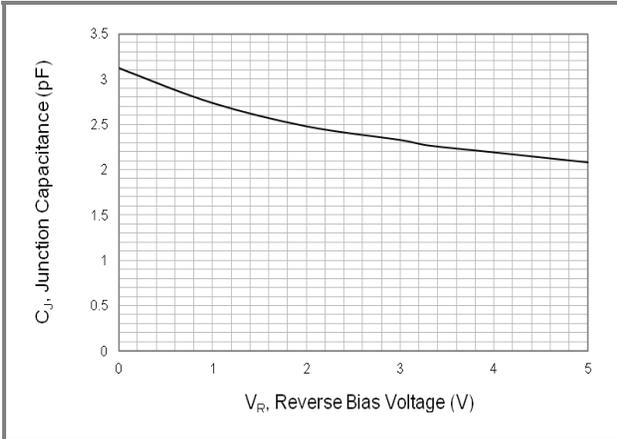


Fig.1 Typical Junction Capacitance

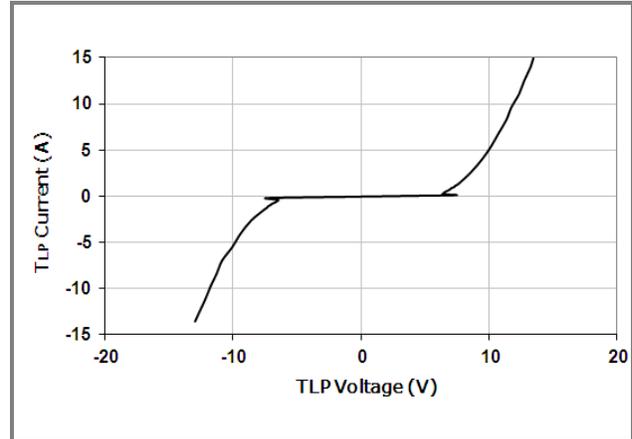


Fig2 Transmission Line Pulsing (TLP) Measurement

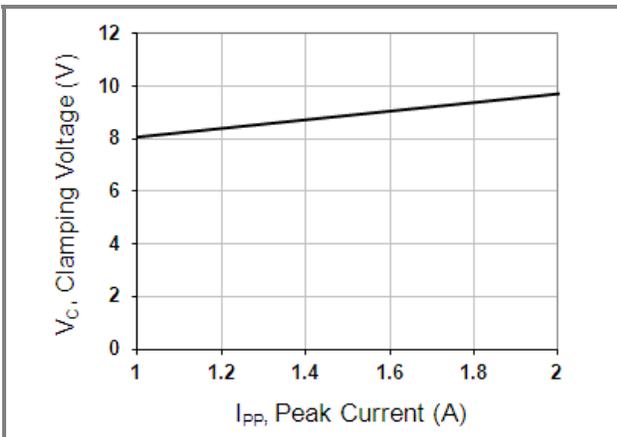


Fig.3 Typical Peak Clamping Voltage(8/20 μ s)

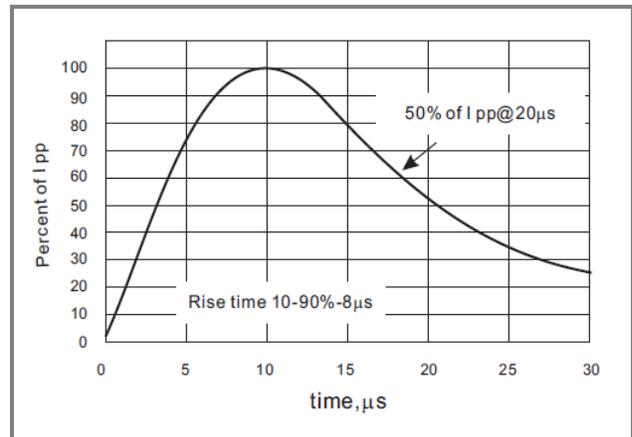


Fig.4 8/20 μ s Pulse Waveform

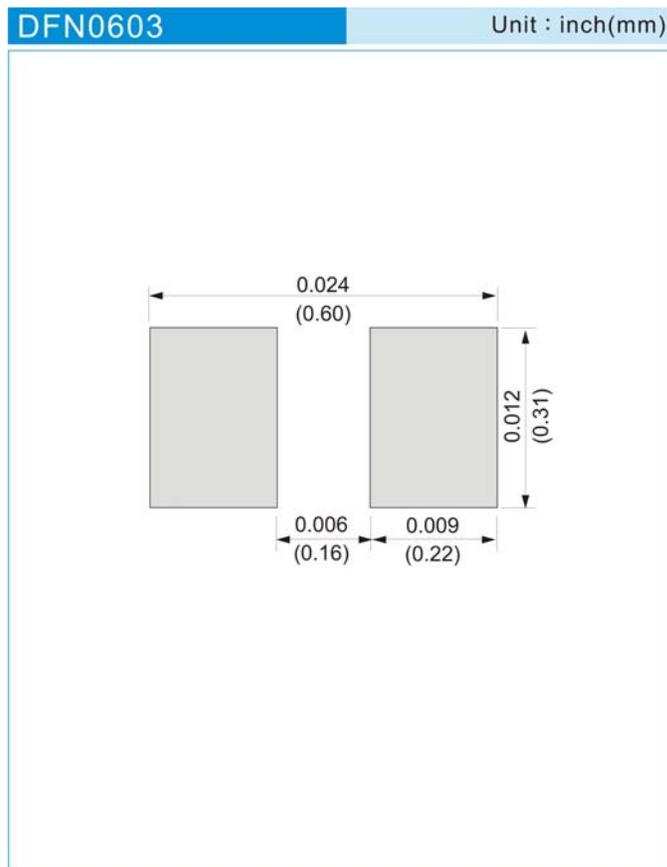


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PART NO PACKING CODE VERSION

Part No Packing Code	Package Type	Packing type	Marking	Version
PJEC5V0V3FN2B_R1_00001	DFN0603	10K pcs / 7" reel	O	Halogen free

MOUNTING PAD LAYOUT





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