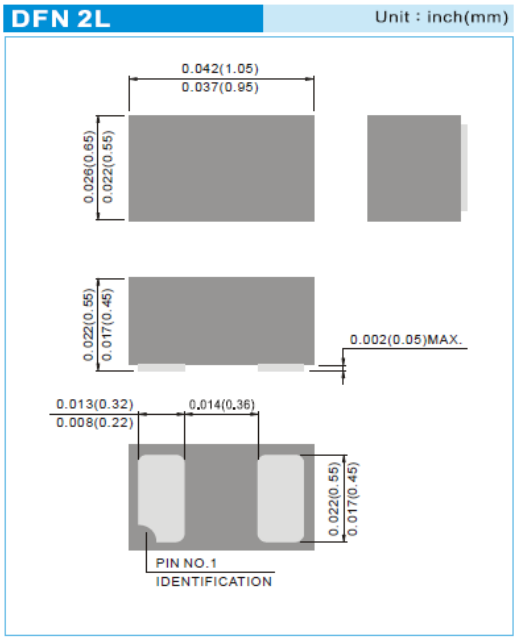
PJEC3V3M1FN2

Low Capacitance TVS/ESD Protection

V_{RWM}	3.3 V



Features

- Bidirectional ESD protection of one line
- IEC61000-4-2(ESD): ±15kV Air, ±8kV Contact Compliance with the capability up to ±30kV
- IEC61000-4-4(EFT): 40A(5/50nS)
- IEC61000-4-5(Lightning): 5A(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: DFN 2L, Plastic
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 0.00004 ounces, 0.0011 grams
- Marking: BG

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

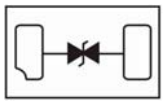


Fig.166(Top View)

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

PARAMETER	SYMBOL	LIMIT	UNITS
ESD IEC61000-4-2(Air) ESD IEC61000-4-2(Contact)	V_{ESD}	±30 ±30	kV
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°C unless otherwise noted)

PARAMETER	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNITS
Reverse Stand-Off Voltage	V_{RWM}	-	-	-	3.3	V
Punch-trough Voltage	V_{PT}	I_{PT}=2μA	3.5	-	-	V
Snap-Break Voltage	V_{SB}	I_{SB}=50mA	2.8	-	-	V
Reverse leakage current	I_R	V_R=3.3V	-	-	0.5	μA
Clamping Voltage	V_{CL}	I_{PP}=1A, t_P=8/20μs	-	-	6	V
		I_{PP}=5A, t_P=8/20μs	-	-	8	
Clamping Voltage TLP(Note 1)	V_{CL}	I_{PP}=4A, t_P=100ns	-	6	-	V
		I_{PP}=8A, t_P=100ns	-	7	-	
Dynamic Resistance	R_{DYN}	t_P=100ns	-	0.25	-	Ω
Off State Junction Capacitance	C_J	0Vdc Bias f=1MHz	-	-	10	pF

NOTES :

1. Testing using Transmission Line Pulse (TLP) conditions: Z_0 = 50Ω, t_P = 100 ns.

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TYPICAL CHARACTERISTIC CURVES

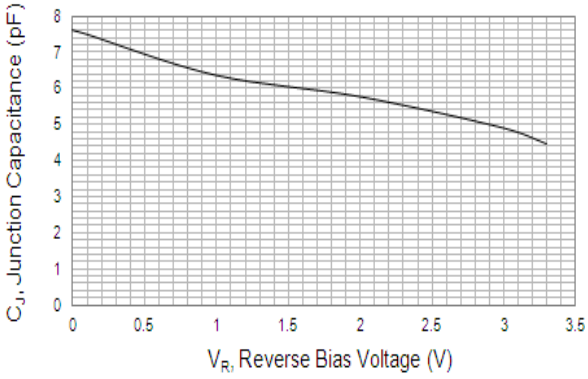

Fig.1 Typical Junction Capacitance

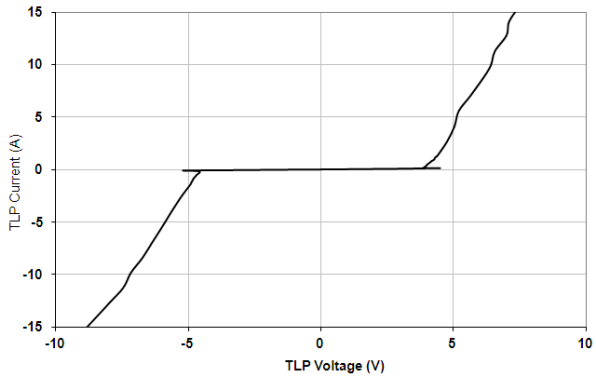

Fig2 Transmission Line Pulsing (TLP) Measurement

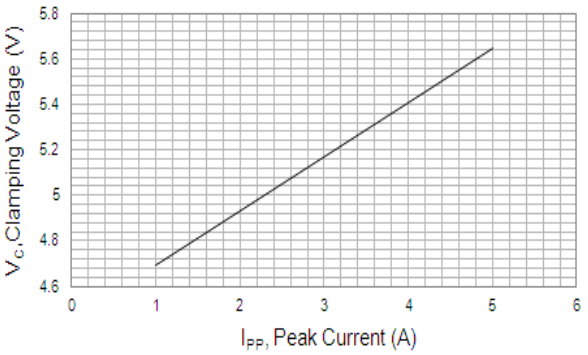

Fig.3 Typical Peak Clamping Voltage(8/20μs)

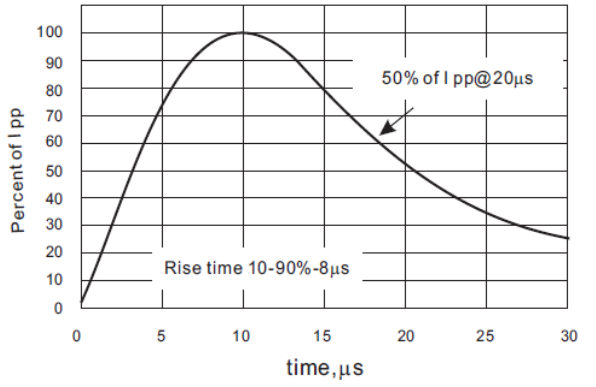

Fig.4 8/20μs Pulse Waveform

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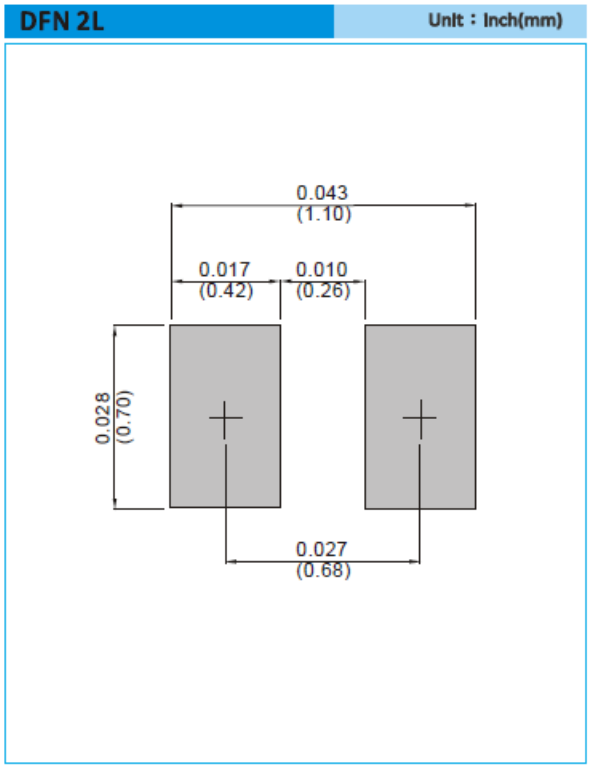
PART NO PACKING CODE VERSION

Part No Packing Code	Package Type	Packing type	Marking	Version
PJEC3V3M1FN2_R1_00001	DFN 2L	8K pcs / 7” reel	BG	Halogen free

MOUNTING PAD LAYOUT



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