



BI-DIRECTIONAL ESD PROTECTION DIODE

This bi-directional TVS has been designed to protect sensitive equipment against ESD and to prevent Latch-Up events in CMOS circuitry operating at 12Vdc and below. This offers an integrated solution to protect a single data line where the board space is a premium.

SPECIFICATION FEATURES

- 115W Power Dissipation (8/20µs Waveform)
- Low Leakage Current, Maximum of 0.1μA@12Vdc
- · Very low Clamping voltage
- IEC 61000-4-2 ESD ±30kV air, ±30kV Contact Compliance
- Lead free in compliance with EU RoHS2.0 (2011/65/EU & 2015/865/EU directive)
- Green molding compound as per IEC61249 Std. . (Halogen Free)

MECHANICAL DATA

• Terminals : Solderable per MIL-STD-750, Method 2026

· Approx. Weight: 0.00004 ounces ,0.001 grams

· Case: DFN 2L, Plastic

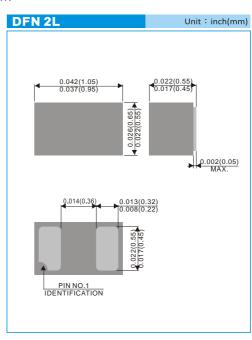
• Marking : BX

APPLICATIONS

- · Video I/O ports protection
- Set Top Boxes
- Portable Instrumentation



Fig.156(TOP VIEW)



MAXIMUM RATINGS (Ta=25°C unless otherwise noted)

RATING	SYMBOL	VALUE	UNITS
Peak Pulse Power (8/20 μs Waveform)	Ррр	115	W
Peak Pulse Current (8/20 μs Waveform)	I РРМ	5	А
ESD Voltage per IEC61000-4-2 (Contact)	Vesd	<u>+</u> 30	kV
ESD Voltage per IEC61000-4-2 (Air)	Vesd	<u>+</u> 30	kV
ESD Voltage (HBM)	Vesd	<u>+</u> 8	kV
Operating Junction and Storage Temperature Range	TJ,TsTG	-55 to +150	°C

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ELECTRICAL CHARACTERISTICS (TA=25°C unless otherwise noted)

PARAMETER	SYMBOL	CONDITIONS	MIN.	TYP.	MAX.	UNITS
Reverse Stand-Off Voltage	VRWM		-	-	12	٧
Reverse Breakdown Voltage	VBR	I BR=1mA	13	-	-	V
Reverse Leakage Current	IR	V _R =12V	-	-	0.1	μА
Clamping Voltage (8/20μs)	Vc	I pp=1A I pp=5A			20 23	V
Off State Junction Capacitance	Сл	0 Vdc Bias f=1MHz	-	15	-	pF

TYPICAL CHARACTERISTIC CURVES

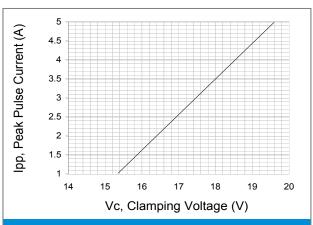


Fig.1 Typical peak clamping voltage(8/20µS)

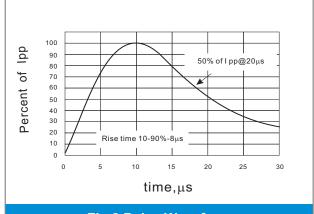


Fig.2 Pulse Waveform

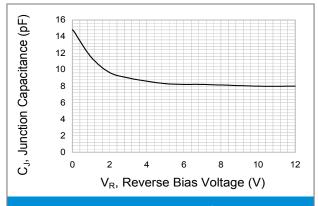


Fig.3 Typical Junction Capacitance

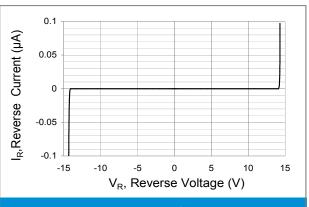


Fig.4 Typical Reverse Characteristics

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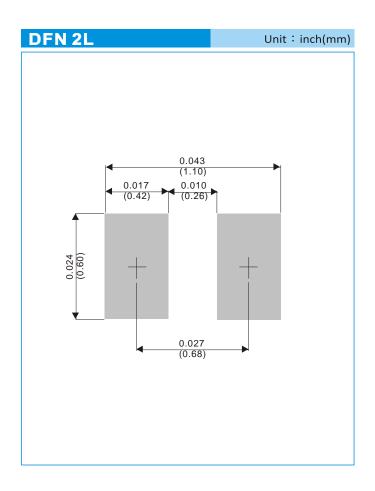




Part No Packing Code Version

Part No Packing Code	Package Type	Packing Type	Marking	Version
PJSD12LCFN2_R1_00001	DFN 2L	8K pcs / 7" reel	вх	Halogen free

MOUNTING PAD LAYOUT



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