PJSD05CFN2

BI-DIRECTIONAL TVS

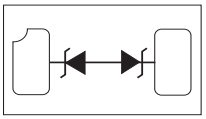
This bi-directional TVS has been designed to protect sensitive equipment against ESD and to prevent Latch-Up events in CMOS circuitry operating at 5Vdc and below.This offers an integrated solution to protect a single data line where the board space is a premium.

SPECIFICATION FEATURES

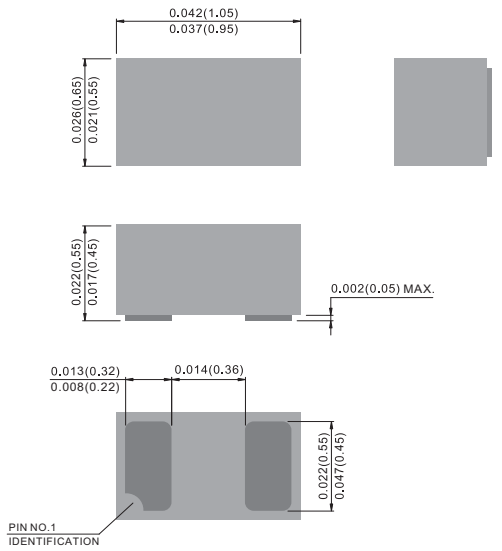
- 200W Power Dissipation (8/20μs Waveform)
- Low Leakage Current, Maximum of 1μA@5Vdc
- Very low Clamping voltage
- IEC 61000-4-2 ESD 15kV air, 8kV Contact Compliance
- In compliance with EU RoHS 2002/95/EC directives
- Terminals : Solderable per MIL-STD-750, Method 2026
- Case : DFN 2L, Plastic
- Marking : BT

APPLICATIONS

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



DFN 2L — Unit : inch(mm)



MAXIMUM RATINGS

Rating	Symbol	Value	Units
Peak Pulse Power (8/20 μs Waveform)	P_{PP}	200	W
Maximum Peak Pulse Current (8/20 μs Waveform)	I_{PPM}	18	A
ESD Voltage (HBM)	V_{ESD}	>25	kV
Operating Junction and Storage Temperature Range	T_J,T_{STG}	-55 to +150	°C

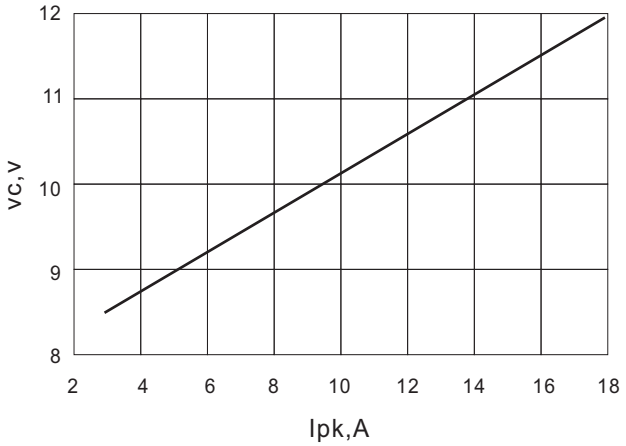
ELECTRICAL CHARACTERISTICS (T_A=25°C)

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Units
Reverse Stand-Off Voltage	V_{WRM}		-	-	5.0	V
Reverse Breakdown Voltage	V_{BR}	I_{BR}=1mA	6	-	-	V
Reverse Leakage Current	I_R	V_R=5V	-	-	1.0	μA
Clamping Voltage (8/20μs)	V_C	I_{PP}=5A	-	-	11	V
Clamping Voltage (8/20μs)	V_C	I_{PP}=15A	-	-	14	V
Off State Junction Capacitance	C_J	0 Vdc Bias f=1MHz	-	-	70	pF
Off State Junction Capacitance	C_J	5 Vdc Bias f=1MHz	-	-	60	pF

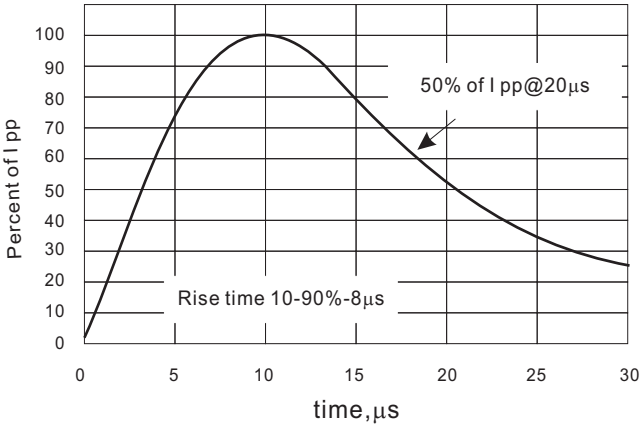
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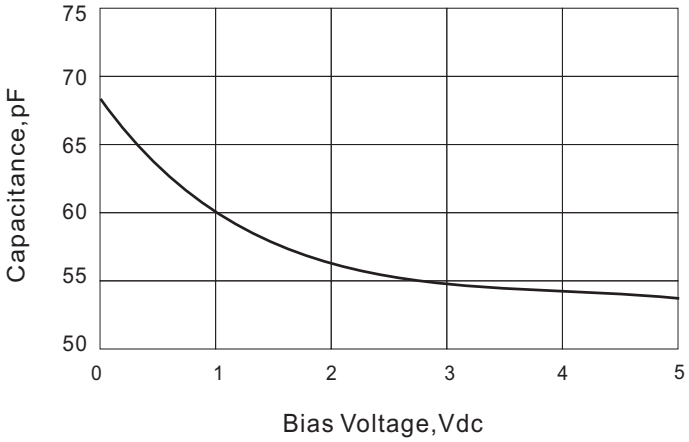
TYPICAL CHARACTERISTICS



Clamping Voltage vs I pp 8/20μs Surge



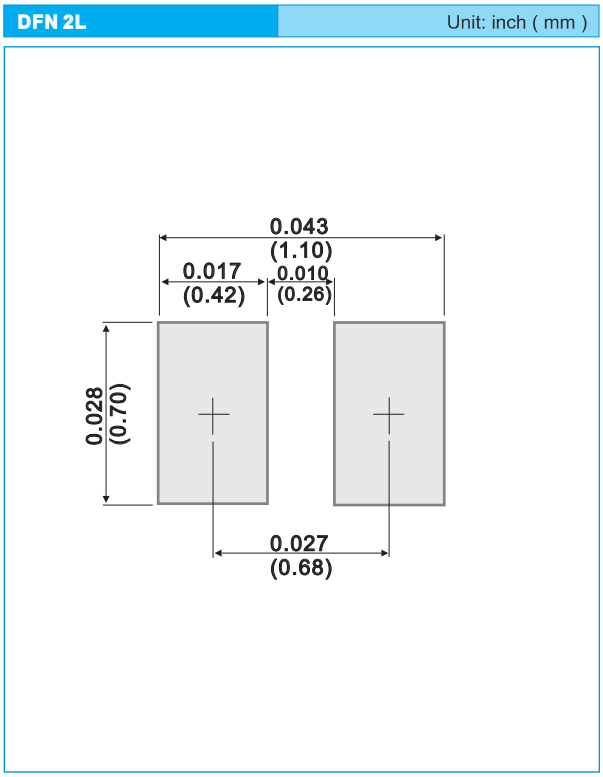
Pulse Waveform



Capacitance vs. Biasing Voltage@1MHz

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MOUNTING PAD LAYOUT



ORDER INFORMATION

- Packing information

  T/R - 8K per 7" plastic Reel

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