



# 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

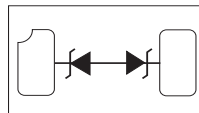
- 200W Power Dissipation (8/20μs Waveform)
- Low Leakage Current, Maximum of 1 μA@5Vdc
- Very low Clamping voltage
- IEC 61000-4-2 ESD 15kV air, 8kV Contact Compliance
- Lead free in compliance with EU RoHS2.0 (2011/65/EU & 2015/865/EU directive)
- Green molding compound as per IEC61249 Std. . (Halogen Free)

### MECHANICAL DATA

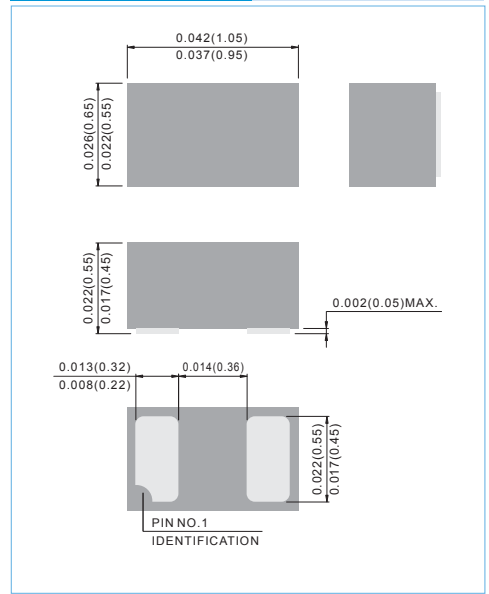
- Terminals : Solderable per MIL-STD-750, Method 2026
- Case : DFN 2L, Plastic
- Weight : 0.00004 ounces, 0.0011 grams
- Marking : BT

### 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)	PP	200	W
Maximum Peak Pulse Current (8/20 μs Waveform)	IPPM	18	A
ESD Voltage (HBM)	VESD	>25	kV
Operating Junction and Storage Temperature Range	TJ, TSTG	-55 to +150	°C

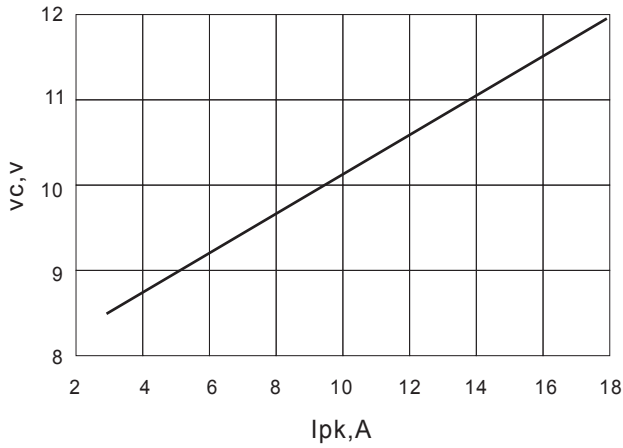
### ELECTRICAL CHARACTERISTICS (TA=25°C)

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Units
Reverse Stand-Off Voltage	VWRM		-	-	5.0	V
Reverse Breakdown Voltage	VBR	IBR=1mA	6	-	-	V
Reverse Leakage Current	IR	VR=5V	-	-	1.0	μA
Clamping Voltage (8/20μs)	Vc	IPP=5A	-	-	11	V
Clamping Voltage (8/20μs)	Vc	IPP=15A	-	-	14	V
Off State Junction Capacitance	CJ	0 Vdc Bias f=1MHz	-	-	70	pF
Off State Junction Capacitance	CJ	5 Vdc Bias f=1MHz	-	-	60	pF

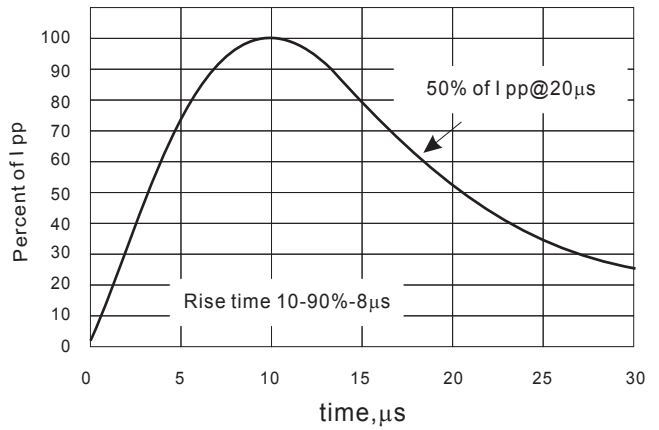


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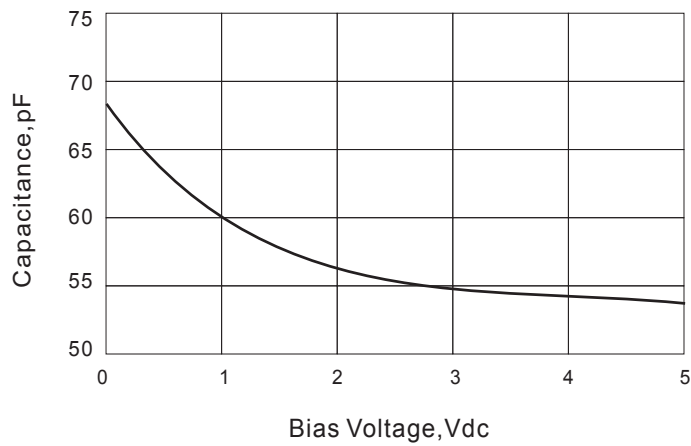
## TYPICAL CHARACTERISTICS



Clamping Voltage vs I<sub>pp</sub> 8/20µs Surge



Pulse Waveform

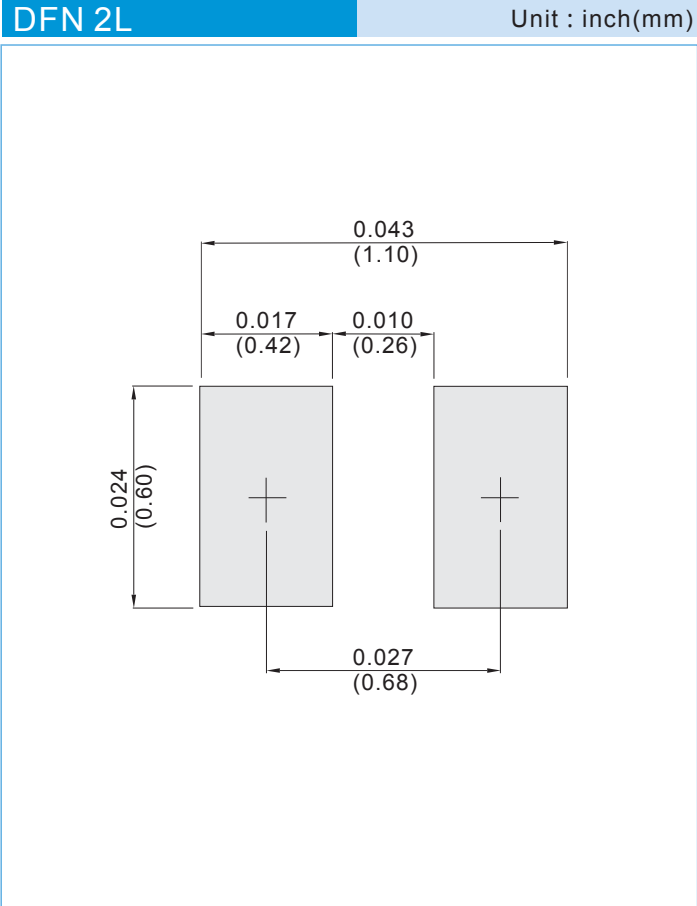


Capacitance vs. Biasing Voltage@1MHz



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## MOUNTING PAD LAYOUT



## ORDER INFORMATION

- Packing information  
T/R - 8K per 7" plastic Reel



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**Part No. \_ packing code \_ Version**

PJSD05CFN2\_R1\_00001

For example :

**RB500V-40\_R2\_00001**



Packing Code <b>XX</b>				Version Code <b>XXXXX</b>		
Packing type	1 <sup>st</sup> Code	Packing size code	2 <sup>nd</sup> Code	HF or RoHS	1 <sup>st</sup> Code	2 <sup>nd</sup> ~5 <sup>th</sup> Code
Tape and Ammunition Box (T/B)	A	N/A	0	HF	0	serial number
Tape and Reel (T/R)	R	7"	1	RoHS	1	serial number
Bulk Packing (B/P)	B	13"	2			
Tube Packing (T/P)	T	26mm	X			
Tape and Reel (Right Oriented) (TRR)	S	52mm	Y			
Tape and Reel (Left Oriented) (TRL)	L	PANASERT T/B CATHODE UP (PBCU)	U			
FORMING	F	PANASERT T/B CATHODE DOWN (PBCD)	D			



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