



### **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
- Lead free in comply with EU RoHS 2002/95/EC directives.
- Green molding compound as per IEC61249 Std. . (Halogen Free)

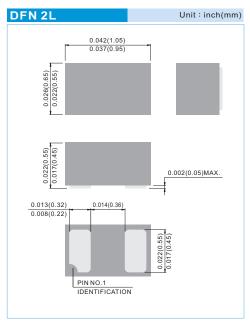
### **MECHANICAL DATA**

- 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





### MAXIMUM RATINGS

Rating	Symbol	Value	Units
Peak Pulse Power (8/20 μs Waveform)	Рр	200	W
Maximum Peak Pulse Current (8/20 μs Waveform)	I PPM	18	А
ESD Voltage (HBM)	Vesd	>25	kV
Operating Junction and Storage Temperature Range	Тյ,Тѕтс	-55 to +150	°C

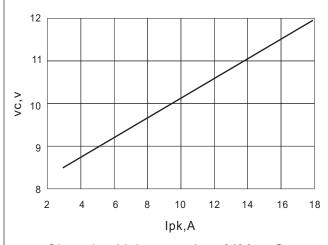
### ELECTRICAL CHARACTERISTICS (TA=25°C)

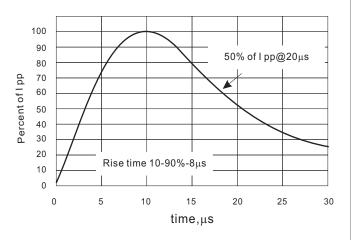
Parameter	Symbol	Conditions	Min.	Тур.	Max.	Units
Reverse Stand-Off Voltage	Vwrm		-	-	5.0	V
Reverse Breakdown Voltage	VBR	I <sub>BR</sub> =1mA	6	-	-	٧
Reverse Leakage Current	IR	V <sub>R</sub> =5V	-	-	1.0	μА
Clamping Voltage (8/20μs)	Vc	IPP=5A	-	-	11	٧
Clamping Voltage (8/20μs)	Vc	IPP=15A	-	-	14	٧
Off State Junction Capacitance	Cı	0 Vdc Bias f=1MHz	-	-	70	pF
Off State Junction Capacitance	Сл	5 Vdc Bias f=1MHz	-	-	60	pF





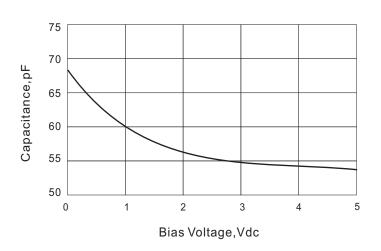
### TYPICAL CHARACTERISTICS





Clamping Voltage vs I pp 8/20 µs Surge

Pulse Waveform

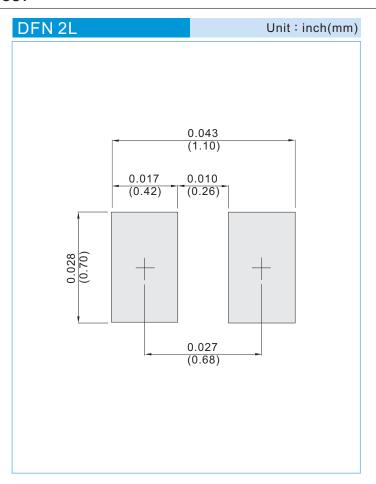


Capacitance vs. Biasing Voltage@1MHz





### **MOUNTING PAD LAYOUT**



### **ORDER INFORMATION**

· Packing information

T/R - 8K per 7" plastic Reel

#### **LEGAL STATEMENT**

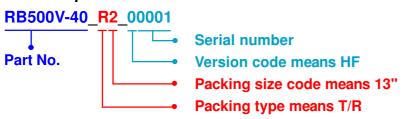
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### For example:



Packing Code XX			Version Code XXXXX			
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
T/B	A	N/A	0	HF	0	serial number
T/R	R	7''	1	RoHS	1	serial number
B/P	В	13"	2			
T/P	Т	26mm	X			
TRR	S	52mm	Y			
TRL	L	PBCU	U			
FORMING	F	PBCD	D			

### Part No\_packing code\_Version

PJSD05CFN2\_R1\_00001