

**STANDARD TVS COMPONENTS****APPLICATIONS**

- ✓ Noise Suppression for Data Lines
- ✓ Laptop Computers
- ✓ Cellular Phones
- ✓ Digital Cameras
- ✓ Personal Digital Assistant (PDA)

**IEC COMPATIBILITY (EN61000-4)**

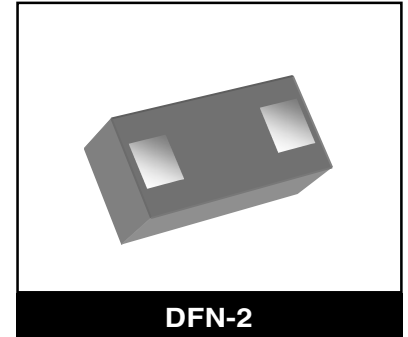
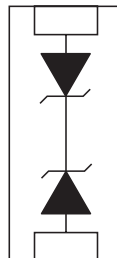
- ✓ 61000-4-2 (ESD): Air - 15kV, Contact - 8kV
- ✓ 61000-4-4 (EFT): 40A - 5/50ns

**FEATURES**

- ✓ 10 Watts Peak Pulse Power per Line ( $t_p=10/1000\mu s$ )
- ✓ ESD Protection > 40 kilovolts
- ✓ Bidirectional Configuration
- ✓ Protects One Data Line
- ✓ Low Clamping Voltage
- ✓ Easy Placement for Manufacturing
- ✓ Low Capacitance
- ✓ RoHS Compliant

**MECHANICAL CHARACTERISTICS**

- ✓ DFN-2 Package
- ✓ Weight 0.8 milligrams (Approximate)
- ✓ Available in Lead-Free Pure-Tin Plating
- ✓ Solder Reflow Temperature:  
Pure-Tin - Sn, 100: 260-270°C
- ✓ Consult Factory for Leaded Device Availability
- ✓ Flammability Rating UL 94V-0
- ✓ 8mm Tape and Reel Per EIA Standard 481
- ✓ Device Part Number on Reel & Marking Code on Device

**PIN CONFIGURATION**

# PRSB6.8C

## DEVICE CHARACTERISTICS

### MAXIMUM RATINGS @ 25°C Unless Otherwise Specified

PARAMETER	SYMBOL	VALUE	UNITS
Operating Temperature	$T_{OPR}$	-50 to 150	°C
Storage Temperature	$T_{STG}$	-55 to 150	°C
Junction Temperature	$T_A$	150	°C
Peak Pulse Power (tp = 10/1000µs) - See Figure 1	$P_{PK}$	10	Watts
Power Dissipation	P	150	mW

### ELECTRICAL CHARACTERISTICS PER LINE @ 25°C Unless Otherwise Specified

PART NUMBER	DEVICE MARKING CODE	RATED STAND-OFF VOLTAGE  $V_{WM}$ VOLTS	MINIMUM BREAKDOWN VOLTAGE  @ 1mA $V_{(BR)}$ VOLTS	MAXIMUM LEAKAGE CURRENT  @3.5V $I_b$ µA	TYPICAL CAPACITANCE  @0V, 1 MHz C pF
PRSB6.8C	A	4.7	5.7	1.0	15

GRAPHS

FIGURE 1  
PEAK PULSE POWER VS PULSE TIME

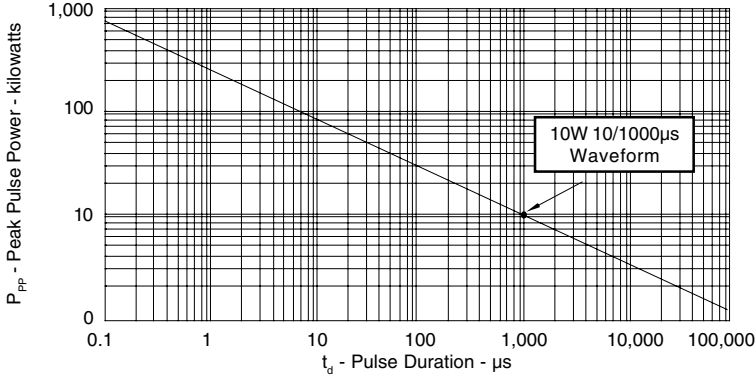


FIGURE 2  
PULSE WAVE FORM

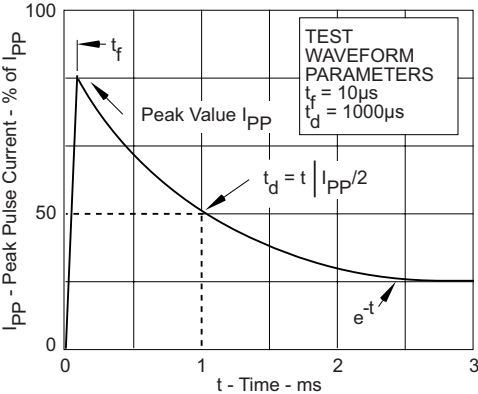
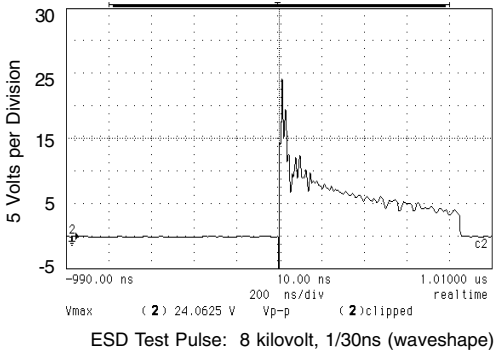
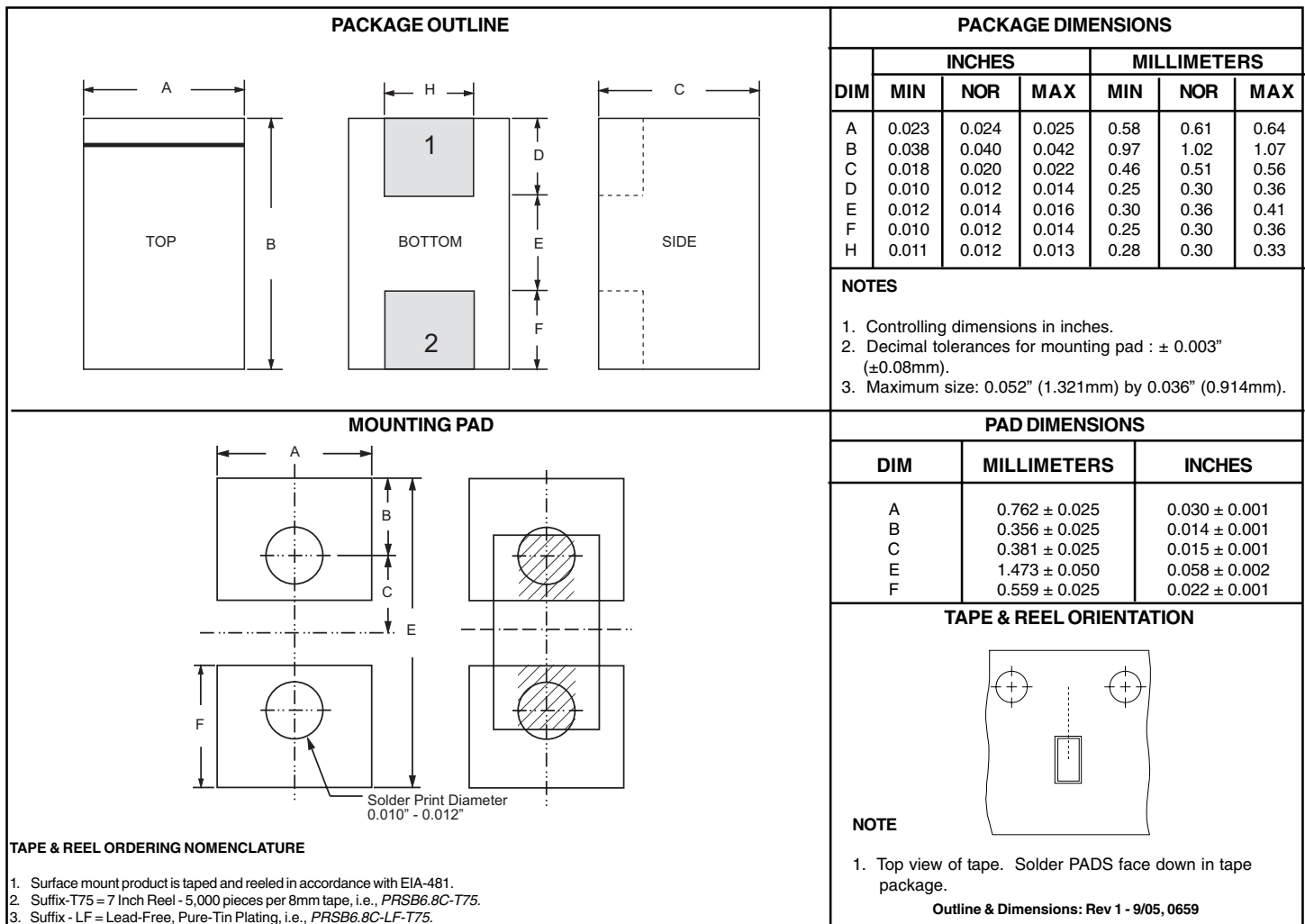


FIGURE 3  
OVERSHOOT & CLAMPING VOLTAGE



# PRSB6.8C

## DFN-2 PACKAGE OUTLINE & DIMENSIONS

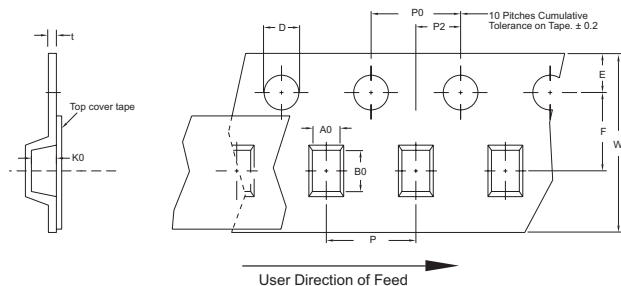


### TAPE & REEL ORDERING NOMENCLATURE

- Surface mount product is taped and reeled in accordance with EIA-481.
- Suffix-T75 = 7 Inch Reel - 5,000 pieces per 8mm tape, i.e., *PRSB6.8C-T75*.
- Suffix - LF = Lead-Free, Pure-Tin Plating, i.e., *PRSB6.8C-LF-T75*.

### Tape & Reel Specifications (Dimensions in millimeters)

Reel Dia.	Tape Width	A0	B0	K0	D	E	F	W	P0	P2	P	tmax
178mm (7")/330mm (13")	8mm	$0.80 \pm 0.10$	$1.20 \pm 0.10$	$0.70 \pm 0.10$	$1.50 \pm 0.10$	$1.75 \pm 0.10$	$3.50 \pm 0.05$	$8.00 \pm 0.30$	$4.00 \pm 0.10$	$2.00 \pm 0.05$	$2.00 \pm 0.10$	0.25



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