

LOW CAPACITANCE TVS COMPONENT**APPLICATIONS**

- ✓ Ethernet - 10/100/1000 Base T
- ✓ Cellular Phones
- ✓ Personal Digital Assistant (PDA)
- ✓ USB Interfaces

IEC COMPATIBILITY (EN61000-4)

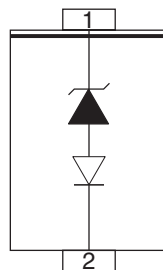
- ✓ 61000-4-2 (ESD): Air - 15kV, Contact - 8kV
- ✓ 61000-4-4 (EFT): 40A - 5/50ns

FEATURES

- ✓ ESD Protection > 25 kilovolts
- ✓ Unidirectional Configuration
- ✓ Protects One Unidirectional Line
- ✓ Low Leakage Current < 1.0 μ A
- ✓ Low Capacitance: 6pF Typical
- ✓ RoHS Compliant

MECHANICAL CHARACTERISTICS

- ✓ Molded EIAJ SC-79 Package
- ✓ Weight 2 milligrams (Approximate)
- ✓ Available Lead-Free Pure-Tin Plating (Annealed)
- ✓ 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 Marking: Marking Code & Polarity Band (Unidirectional Only)

**PIN CONFIGURATION**

DEVICE CHARACTERISTICS

MAXIMUM RATINGS @ 25°C Unless Otherwise Specified

PARAMETER	SYMBOL	VALUE	UNITS
Peak Pulse Power ($t_p = 8/20\mu s$) - See Figure 1	P_{PP}	50	Watts
Peak Pulse Current ($t_p = 8/20\mu s$)	I_{PP}	5	A
Operating Temperature	T_A	-55 to 150	°C
Storage Temperature	T_{STG}	-55 to 150	°C

ELECTRICAL CHARACTERISTICS PER LINE @ 25°C Unless Otherwise Specified

PART NUMBER	DEVICE MARKING CODE	RATED STAND-OFF VOLTAGE	MINIMUM BREAKDOWN VOLTAGE	MINIMUM SNAP BACK VOLTAGE	MAXIMUM CLAMPING VOLTAGE (See Fig. 2)	MAXIMUM LEAKAGE CURRENT	TYPICAL CAPACITANCE
		V_{WM} VOLTS	@ 1mA $V_{(BR)}$ VOLTS	@ $I_{SB} = 10mA$ V_{SB} VOLTS	@ $I_P = 1A$ V_C VOLTS	@ V_{WM} I_b μA	@ 0V, 1MHz C pF
PLW2.8	P	2.8	3.0	2.8	5.0	1	6

FIGURE 1
PEAK PULSE POWER VS PULSE TIME

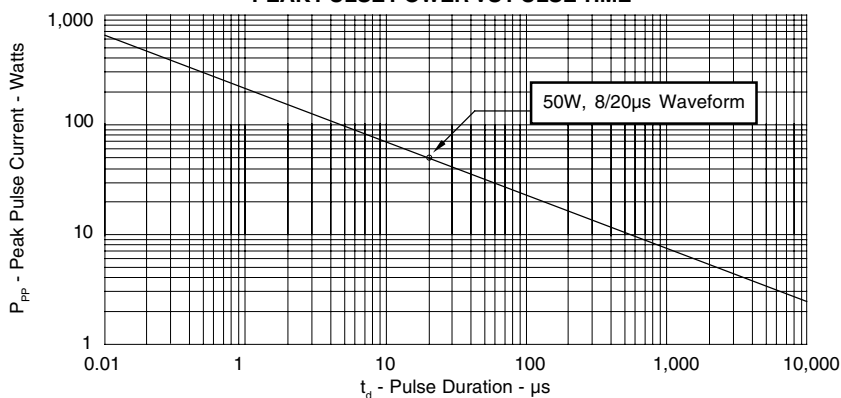
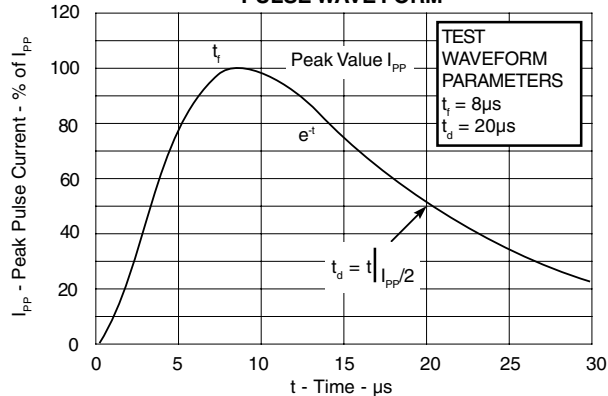
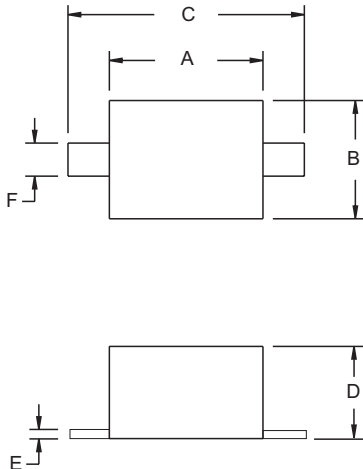
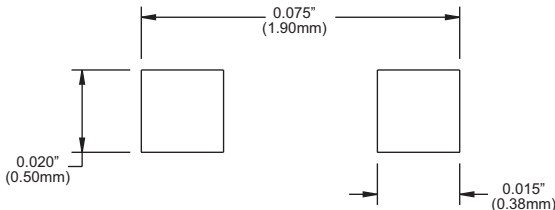


FIGURE 2
PULSE WAVE FORM

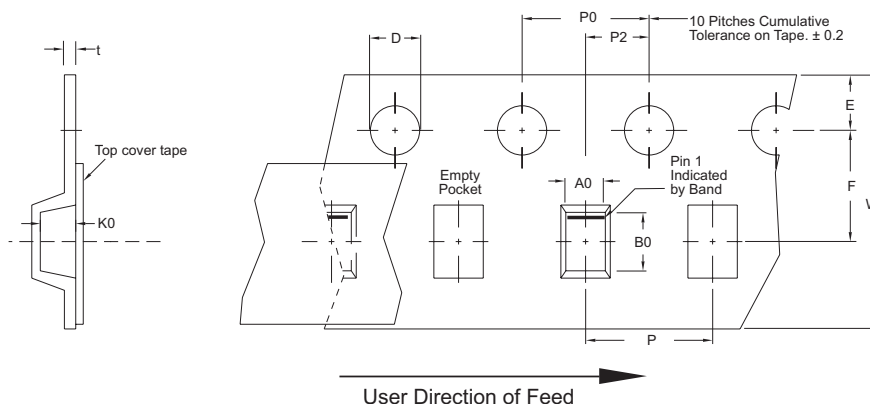


SC-79 PACKAGE OUTLINE & DIMENSIONS

PACKAGE OUTLINE 	SC79 PACKAGE 																																							
	PACKAGE DIMENSIONS <table><tr><th rowspan="2">DIM</th><th colspan="2">INCHES</th><th colspan="2">MILLIMETERS</th></tr><tr><th>MIN</th><th>MAX</th><th>MIN</th><th>MAX</th></tr><tr><td>A</td><td>0.043</td><td>0.049</td><td>1.10</td><td>1.30</td></tr><tr><td>B</td><td>0.028</td><td>0.035</td><td>0.70</td><td>0.90</td></tr><tr><td>C</td><td>0.059</td><td>0.066</td><td>1.50</td><td>1.70</td></tr><tr><td>D</td><td>0.020</td><td>0.028</td><td>0.50</td><td>0.70</td></tr><tr><td>E</td><td>0.003</td><td>0.008</td><td>0.08</td><td>0.20</td></tr><tr><td>F</td><td colspan="2">0.012 BSE</td><td colspan="2">0.30 BSE</td></tr></table>	DIM	INCHES		MILLIMETERS		MIN	MAX	MIN	MAX	A	0.043	0.049	1.10	1.30	B	0.028	0.035	0.70	0.90	C	0.059	0.066	1.50	1.70	D	0.020	0.028	0.50	0.70	E	0.003	0.008	0.08	0.20	F	0.012 BSE		0.30 BSE	
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MOUNTING PAD 	NOTES 1. Controlling Dimensions in Millimeters. 2. Dimensions are exclusive of mold flash and metal burrs. TAPE & REEL ORDERING NOMENCLATURE 1. Surface mount product is taped and reeled in accordance with EIA-481. 2. Suffix-T7 = 7 Inch Reel - 3,000 pieces per 8mm tape, i.e., PLW2.8-T7. 3. Suffix-LF = Lead-Free, Pure Tin Plating, i.e., PLW2.8-LF-T7. Outline & Dimensions: Rev 2 - 9/05, 06037																																							

Tape & Reel Specifications (Dimensions in millimeters)

Reel Dia.	Tape Width	A0	B0	K0	D	E	F	W	P0	P2	P	tmax
178mm (7")	8mm	1.00 ± 0.10	1.95 ± 0.05	0.75 ± 0.05	1.50 ± 0.10	1.75 ± 0.10	3.50 ± 0.05	8.00 ± 0.30	4.00 ± 0.10	2.00 ± 0.05	4.00 ± 0.10	0.25



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