

LOW CAPACITANCE TVS COMPONENT**APPLICATIONS**

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

IEC COMPATIBILITY (EN61000-4)

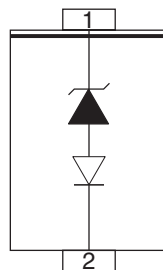
- ✓ 61000-4-2 (ESD): Air - 15kV, Contact - 8kV
- ✓ 61000-4-4 (EFT): 40A - 5/50ns

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

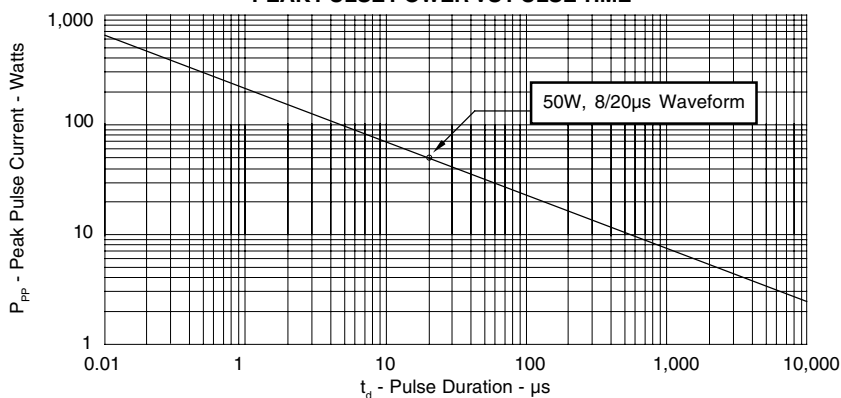
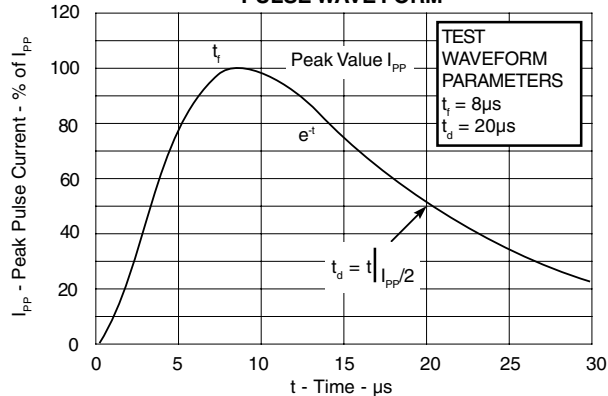
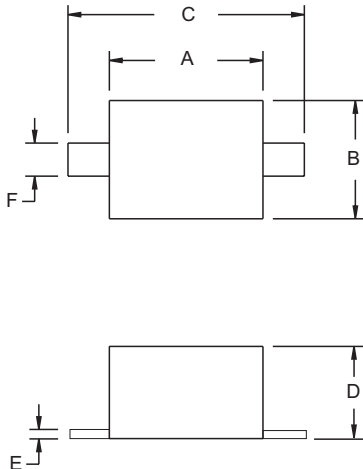
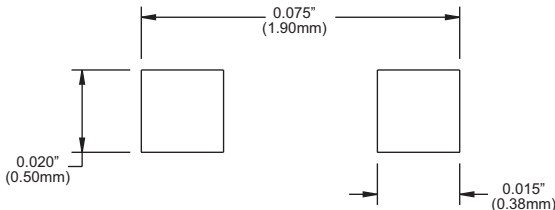


FIGURE 2
PULSE WAVE FORM

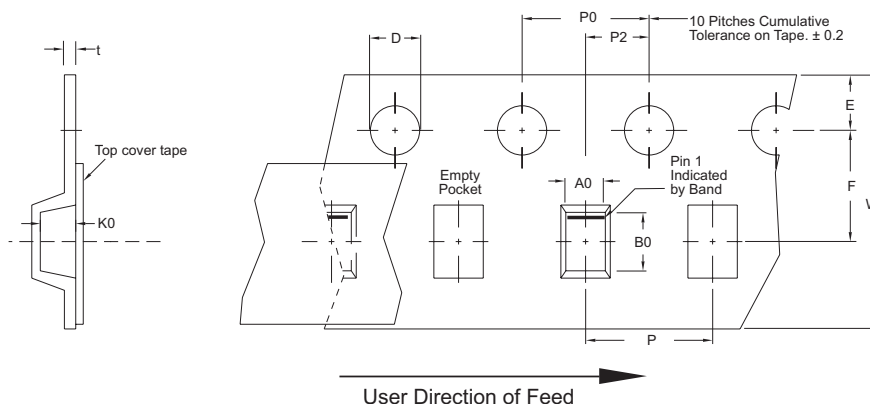


SC-79 PACKAGE OUTLINE & DIMENSIONS

PACKAGE OUTLINE  Top view diagram of the SC79 package showing dimensions A, B, C, and F. Dimension A is the width of the package body, B is the height, C is the total length including leads, and F is the lead thickness. A side view diagram shows dimensions D and E, where D is the package height and E is the lead height.	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  Diagram of the mounting pad showing dimensions: width is 0.075" (1.90mm), height is 0.020" (0.50mm), and lead thickness is 0.015" (0.38mm).	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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