

STANDARD 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

- ✓ 250 Watts Peak Pulse Power per Line (tp=8/20µs)
- ✓ Cable Discharge Event (CDE) Protection
- ✓ ESD Protection > 25 kilovolts
- ✓ Unidirectional Configuration
- ✓ Protects One Unidirectional Line
- ✓ RoHS Compliant in Lead-Free Versions

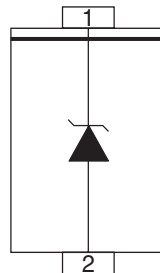
MECHANICAL CHARACTERISTICS

- ✓ Molded EIAJ SC-79
- ✓ Weight 2 milligrams (Approximate)
- ✓ Available in Tin-Lead or Lead-Free Pure-Tin Plating
- ✓ Solder Reflow Temperature:
 - Tin-Lead - Sn/Pb, 85/15: 240-245°C
 - Pure-Tin - Sn, 100: 260-270°C
- ✓ Flammability Rating UL 94V-0
- ✓ 8mm Tape and Reel Per EIA Standard 481
- ✓ Device Marking: Marking Code & Polarity Band



SC-79

PIN CONFIGURATION



DEVICE CHARACTERISTICS

MAXIMUM RATINGS @ 25°C Unless Otherwise Specified			
PARAMETER	SYMBOL	VALUE	UNITS
Peak Pulse Power (tp = 8/20µs) - See Figure 1	P _{PP}	250	Watts
Peak Pulse Current (tp = 8/20µs)	I _{PP}	16	A
Operating Temperature	T _J	-55°C to 150°C	°C
Storage Temperature	T _{STG}	-55°C to 150°C	°C
Soldering Temperature for 10 seconds	T _L	265°C	°C

ELECTRICAL CHARACTERISTICS PER LINE @ 25°C Unless Otherwise Specified								
PART NUMBER	DEVICE MARKING CODE	RATED STAND-OFF VOLTAGE	MINIMUM BREAKDOWN VOLTAGE	TYPICAL FORWARD VOLTAGE	MAXIMUM CLAMPING VOLTAGE (See Fig. 2)	MAXIMUM CLAMPING VOLTAGE (See Fig. 2)	MAXIMUM LEAKAGE CURRENT	TYPICAL CAPACITANCE
		V _{WM} VOLTS	@ 1mA V _(BR) VOLTS	@ 100mA V _F VOLTS	@ I _p = 5A V _C VOLTS	@ I _p = 16A V _C VOLTS	@ V _{WM} I _b µA	@ 0V, 1MHz C pF
PLW0501H	U5	5.0	6.0	0.8	9.8	12.5	5	120

FIGURE 1
PEAK PULSE POWER VS PULSE TIME

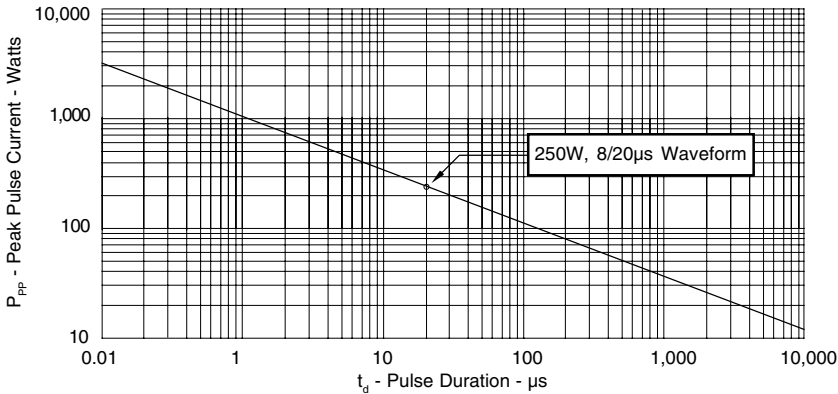
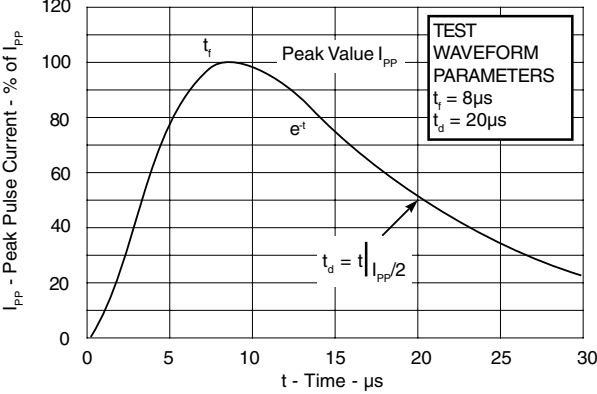


FIGURE 2
PULSE WAVEFORM

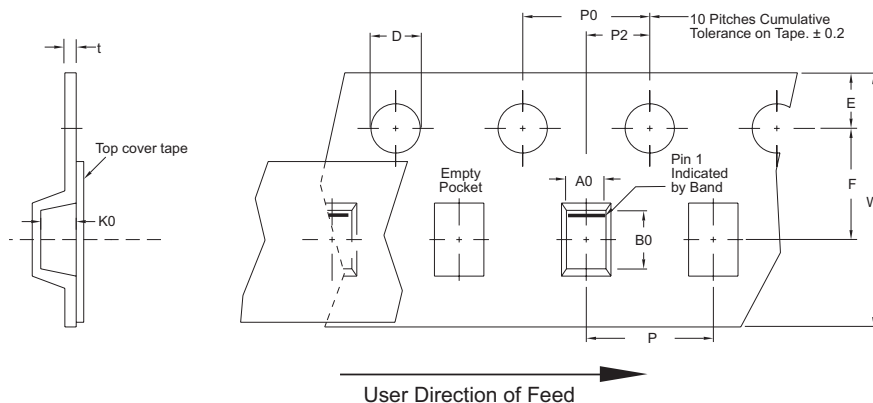


PACKAGE OUTLINE & DIMENSIONS

PACKAGE OUTLINE		SC79 PACKAGE			
PACKAGE DIMENSIONS					
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		
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., <i>PLW0501H-T73</i> . 3. Suffix-T13 = 13 Inch Reel - 10,000 pieces per 8mm tape, i.e., <i>PLW0501H-T13</i> . 4. Suffix-LF = Lead-Free, Pure Tin Plating, i.e., <i>PLW0501H-LF-T73</i> . 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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ProTek Devices
 2929 South Fair Lane, Tempe, AZ 85282
 Tel: 602-431-8101 Fax: 602-431-2288
 E-Mail: sales@protekdevices.com
 Web Site: www.protekdevices.com