

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

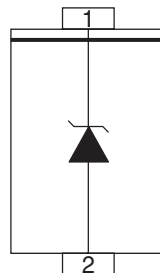
- ✓ 250 Watts Peak Pulse Power per Line ($t_p=8/20\mu s$)
- ✓ Cable Discharge Event (CDE) Protection
- ✓ ESD Protection > 25 kilovolts
- ✓ Unidirectional Configuration
- ✓ Protects One Unidirectional Line
- ✓ RoHS Compliant

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



PLW0501H

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 _A	-55 to 150	°C
Storage Temperature	T _{STG}	-55 to 150	°C
Soldering Temperature for 10 seconds	T _L	265	°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

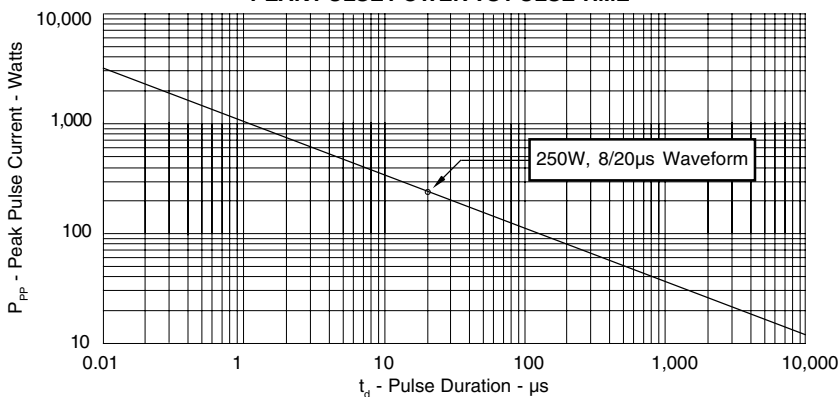
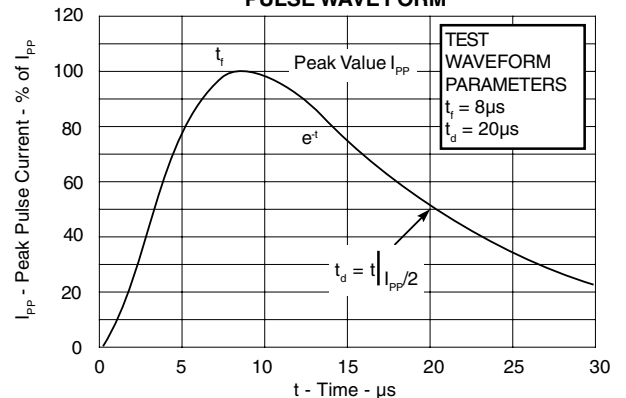
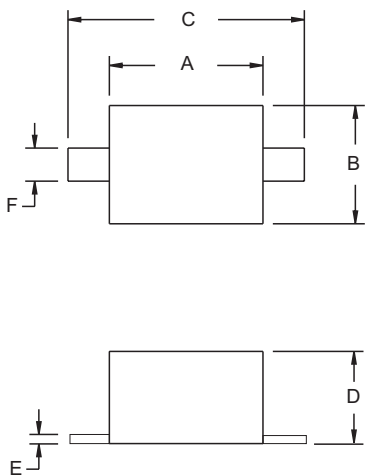

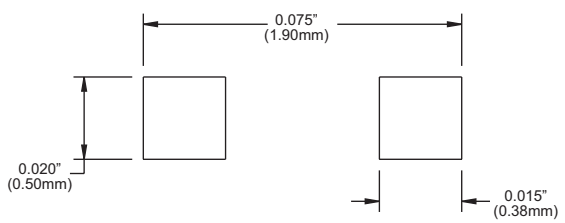


FIGURE 2
PULSE WAVE FORM



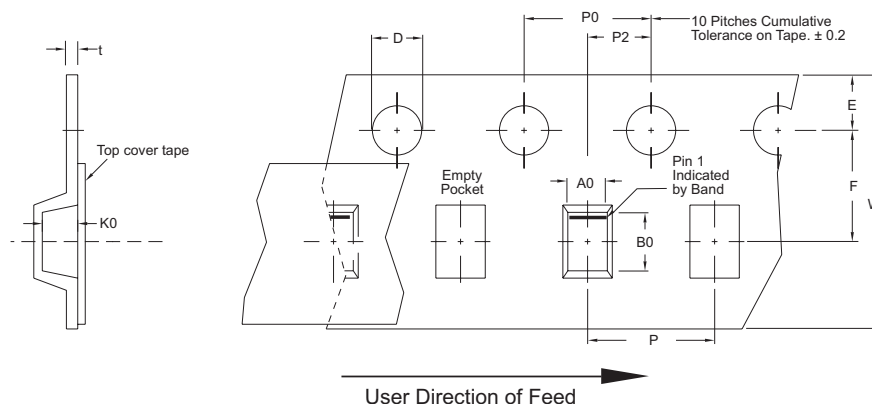
PLW0501H

SC-79 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 <ol style="list-style-type: none"> Controlling Dimensions in Millimeters. Dimensions are exclusive of mold flash and metal burrs. 		
		TAPE & REEL ORDERING NOMENCLATURE <ol style="list-style-type: none"> Surface mount product is taped and reeled in accordance with EIA-481. Suffix-T73 = 7 Inch Reel - 3,000 pieces per 8mm tape, i.e., PLW05010H-T73. Suffix-LF = Lead-Free, Pure Tin Plating, i.e., PLW0501H-LF-T73. 		
		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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