

LOW CAPACITANCE TVS ARRAY

APPLICATIONS

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

IEC COMPATIBILITY (EN61000-4)

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

FEATURES

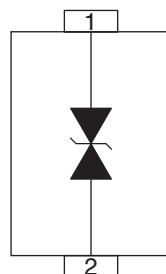
- ✓ ESD Protection > 40 kilovolts
- ✓ 10 Watts Peak Pulse Power per Line ($t_p=10/1000\mu s$)
- ✓ Bidirectional Configuration
- ✓ Replacement for MLV (0805)
- ✓ Small Surface Mount Package
- ✓ Protects One Data Line
- ✓ Low Clamping Voltage
- ✓ Low Capacitance
- ✓ RoHS Compliant

MECHANICAL CHARACTERISTICS

- ✓ Molded EIAJ SC-79
- ✓ Weight 2 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 Marking: Marking Code



PIN CONFIGURATION



RSB6.8S

DEVICE CHARACTERISTICS

MAXIMUM RATINGS @ 25°C Unless Otherwise Specified

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

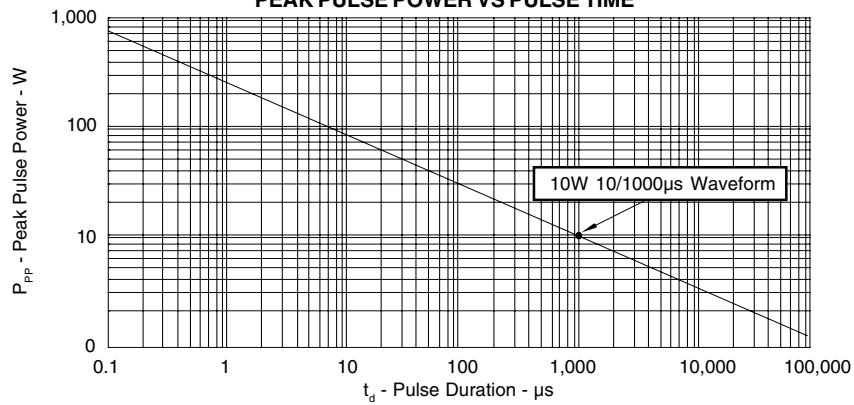
ELECTRICAL CHARACTERISTICS PER LINE @ 25°C Unless Otherwise Specified

PART NUMBER (See Note 1)	DEVICE MARKING	RATED STAND-OFF VOLTAGE V _{WM} VOLTS	MINIMUM BREAKDOWN VOLTAGE @ 1mA V _(BR) VOLTS	MAXIMUM LEAKAGE CURRENT @ 3.5V I _b µA	MAXIMUM CAPACITANCE 0V @ 1 MHz C pF
RSB6.8S	C5	4.7	5.7	0.5	30

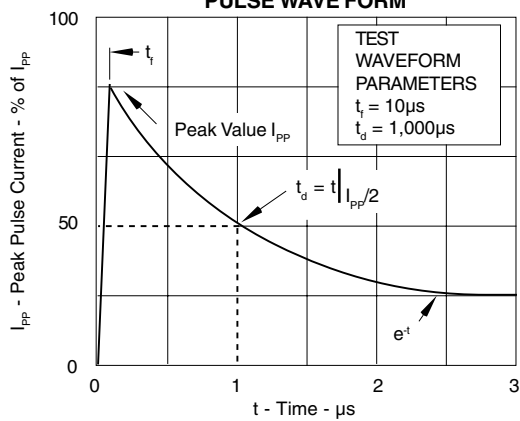
Note 1: Bidirectional device. Test both polarities.

GRAPHS

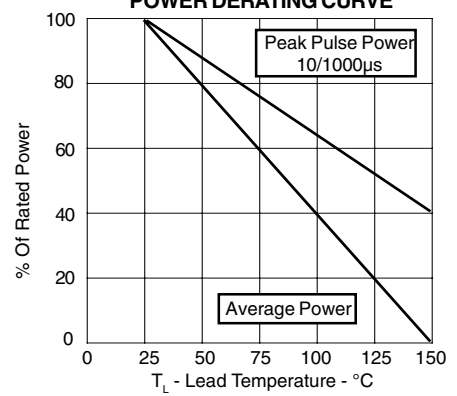
**FIGURE 1
PEAK PULSE POWER VS PULSE TIME**



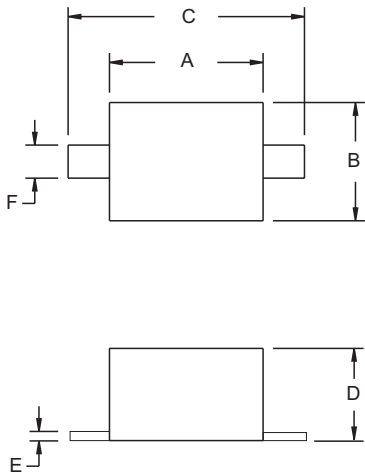

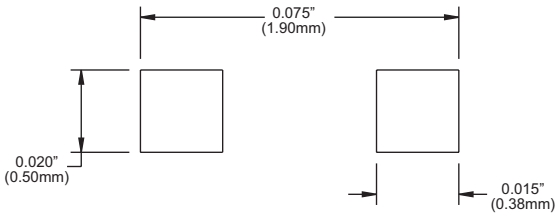
**FIGURE 2
PULSE WAVE FORM**



**FIGURE 3
POWER DERATING CURVE**

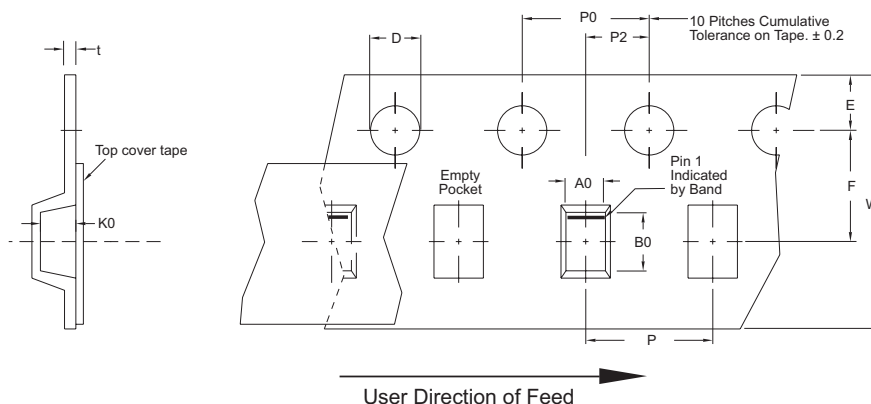


SC-79 PACKAGE OUTLINE & DIMENSIONS

PACKAGE OUTLINE		SC79 PACKAGE				
 <p>Diagram showing package outline dimensions: A, B, C, D, E, F.</p>						
		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			
<th>MOUNTING PAD</th> <td colspan="4"> NOTES 1. Controlling Dimensions in Millimeters. 2. Dimensions are exclusive of mold flash and metal burrs. </td>		MOUNTING PAD	NOTES 1. Controlling Dimensions in Millimeters. 2. Dimensions are exclusive of mold flash and metal burrs.			
 <p>Mounting pad dimensions: 0.075" (1.90mm) width, 0.020" (0.50mm) height, 0.015" (0.38mm) offset.</p>		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., RSB6.8S-T7. 3. Suffix-LF = Lead-Free, Pure Tin Plating, i.e., RSB6.8S-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



COPYRIGHT © ProTek Devices 2007

SPECIFICATIONS: ProTek reserves the right to change the electrical and or mechanical characteristics described herein without notice (except JEDEC).

DESIGN CHANGES: ProTek reserves the right to discontinue product lines without notice, and that the final judgement concerning selection and specifications is the buyer's and that in furnishing engineering and technical assistance, ProTek assumes no responsibility with respect to the selection or specifications of such products.

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