

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

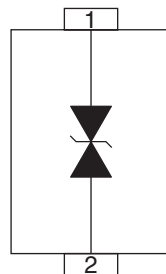
- ✓ ESD Protection > 40 kilovolts
- ✓ 10 Watts Peak Pulse Power per Line ($t_p=10/1000\mu s$)
- ✓ Bidirectional Configuration
- ✓ Replacement for MLV (0805)
- ✓ Small Surface Mount Package
- ✓ Protects One Data Line
- ✓ Low Clamping Voltage
- ✓ Low Capacitance
- ✓ RoHS Compliant

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

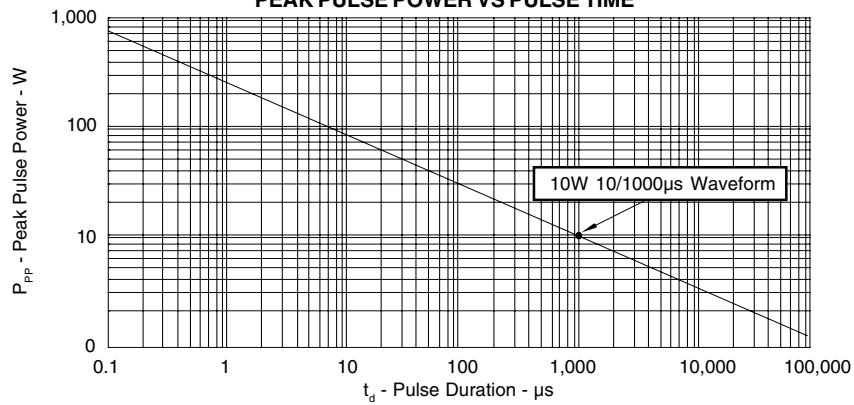
ELECTRICAL CHARACTERISTICS PER LINE @ 25°C Unless Otherwise Specified

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

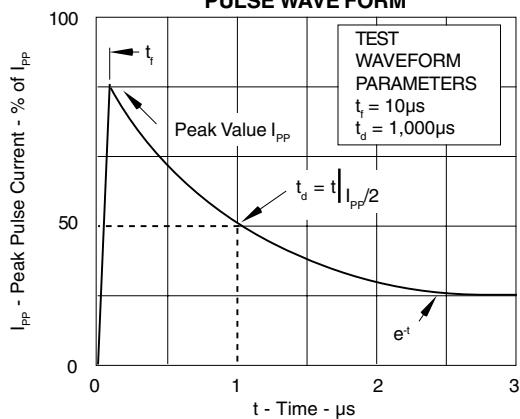
Note 1: Bidirectional device. Test both polarities.

GRAPHS

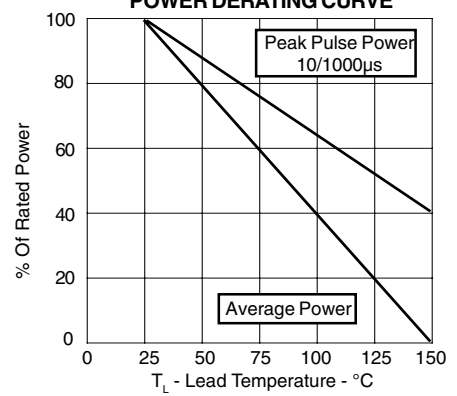
**FIGURE 1
PEAK PULSE POWER VS PULSE TIME**



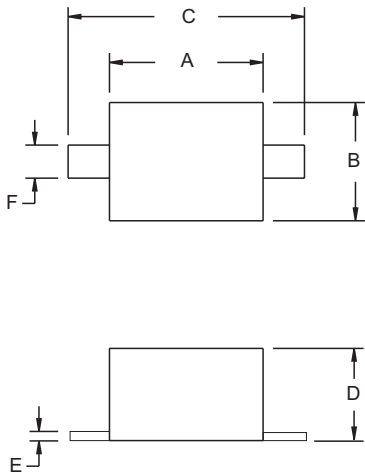

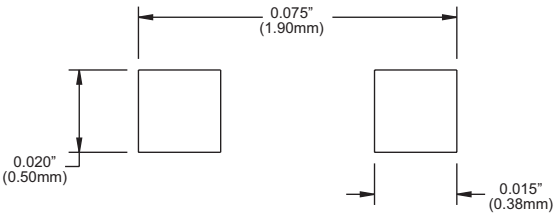
**FIGURE 2
PULSE WAVE FORM**



**FIGURE 3
POWER DERATING CURVE**

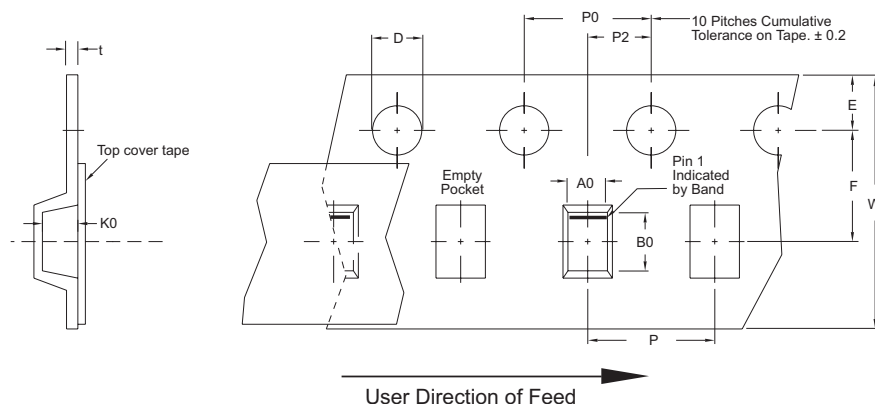


SC-79 PACKAGE OUTLINE & DIMENSIONS

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>Diagram showing mounting pad dimensions: 0.075" (1.90mm), 0.020" (0.50mm), 0.015" (0.38mm).</p>		TAPE & REEL ORDERING NOMENCLATURE 1. Surface mount product is taped and reeled in accordance with EIA-481. 2. Suffix-T7 = 7 Inch Reel - 4,000 pieces per 8mm tape, i.e., RSB6.8S-T74. 3. Suffix-LF = Lead-Free, Pure Tin Plating, i.e., RSB6.8S-LF-T74.				
		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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