

APPLICATIONS

- ✓ Ethernet - 10/100/1000 Base T
- ✓ Cellular Phones
- ✓ Handheld - Wireless Systems
- ✓ Personal Digital Assistant (PDA)
- ✓ USB Interface

IEC COMPATIBILITY (EN61000-4)

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

FEATURES

- ✓ 200 Watts Peak Pulse Power per Line (tp=8/20µs)
- ✓ Unidirectional & Bidirectional Configurations
- ✓ Replacement for MLV (0603)
- ✓ Protects One Power or I/O Port
- ✓ ESD Protection > 40 kilovolts
- ✓ Low Clamping Voltage
- ✓ Available from 3V to 5V
- ✓ ULTRA LOW CAPACITANCE: 1pF 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 CONFIGURATIONS



GBLCSC03 thru GBLCSC05C

DEVICE CHARACTERISTICS

MAXIMUM RATINGS @ 25°C Unless Otherwise Specified

PARAMETER	SYMBOL	VALUE	UNITS
Peak Pulse Power (tp = 8/20µs) - See Figure 1	P _{PP}	200	Watts
Storage Temperature	T _{STG}	-55°C to 150°C	°C
Operating Temperature	T _J	-55°C to 150°C	°C

ELECTRICAL CHARACTERISTICS PER LINE @ 25°C Unless Otherwise Specified

PART NUMBER (See Note 1 & Note 2)	DEVICE MARKING	RATED STAND-OFF VOLTAGE V _{WM} VOLTS	MINIMUM BREAKDOWN VOLTAGE @ 1mA V _(BR) VOLTS	MAXIMUM CLAMPING VOLTAGE (See Fig. 2) @ 8/20µs V _C @ I _{PP}	MAXIMUM LEAKAGE CURRENT @V _{WM} I _D µA	TYPICAL CAPACITANCE
						@0V, 1 MHz C pF
GBLCSC03	3	3.3	4.0	13.0V @ 10.0A	5	1
GBLCSC03C	H	3.3	4.0	13.0V @ 10.0A	5	1
GBLCSC05	5	5.0	6.0	16.0V @ 10.0A	5	1
GBLCSC05C	O	5.0	6.0	16.0V @ 10.0A	5	1

Note 1: Part numbers with an additional "C" suffix are bidirectional devices, i.e., GBLCS05C. For other voltages contact factory.

Note 2: For Bidirectional Devices Only: Electrical characteristics apply in both directions.

FIGURE 1
PEAK PULSE POWER VS PULSE TIME

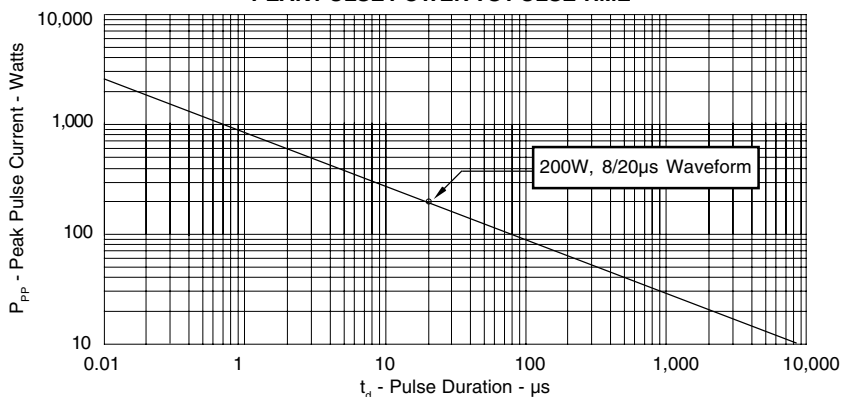
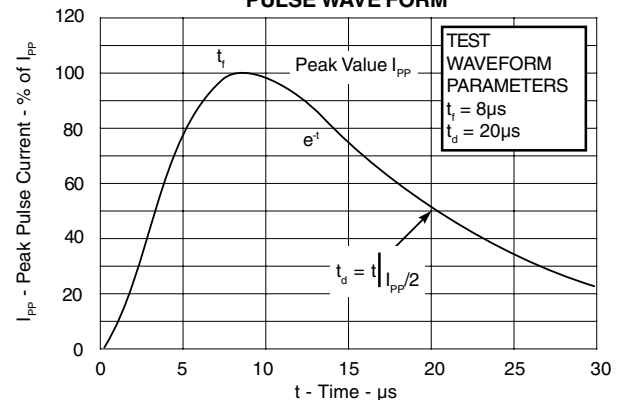


FIGURE 2
PULSE WAVE FORM



GBLCSC03 thru GBLCSC05C

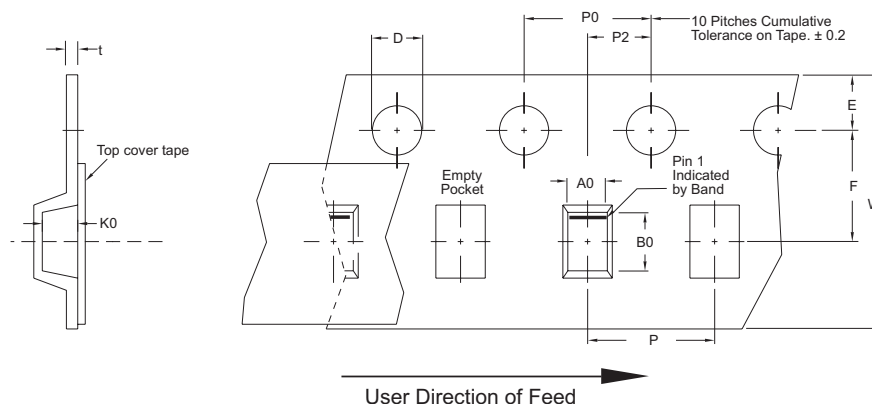
SC-79 PACKAGE OUTLINE & DIMENSIONS

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 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., GBLCSC05-LF-T7. 2. Suffix-T13 = 13 Inch Reel - 10,000 pieces per 8mm tape, i.e., GBLCSC05-LF-T13. 4. Suffix-LF = Lead-Free, Pure Tin Plating, i.e., GBLCSC05C-LF. 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	t _{max}
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 2006

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