

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

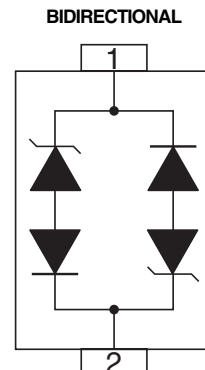
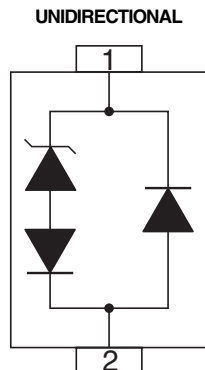
- ✓ 200 Watts Peak Pulse Power per Line (tp=8/20µs)
- ✓ Unidirectional & Bidirectional Configurations
- ✓ Replacement for MLV (0603)
- ✓ Protects One Power or I/O Port
- ✓ ESD Protection > 40 kilovolts
- ✓ Low Clamping Voltage
- ✓ Available from 3V to 5V
- ✓ ULTRA LOW CAPACITANCE: 1pF Typical
- ✓ RoHS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

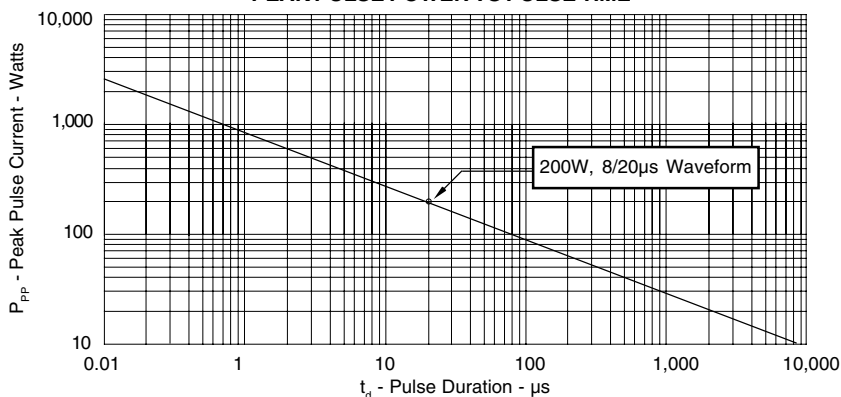
ELECTRICAL CHARACTERISTICS PER LINE @ 25°C Unless Otherwise Specified

PART NUMBER (See Note 1 & Note 2)	DEVICE MARKING	RATED STAND-OFF VOLTAGE	MINIMUM BREAKDOWN VOLTAGE	MAXIMUM CLAMPING VOLTAGE (See Fig. 2)	MAXIMUM LEAKAGE CURRENT	TYPICAL CAPACITANCE
		V _{WM} VOLTS	@ 1mA V _(BR) VOLTS	@ 8/20µs V _C @ I _{PP}	@ V _{WM} I _D µA	@ 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

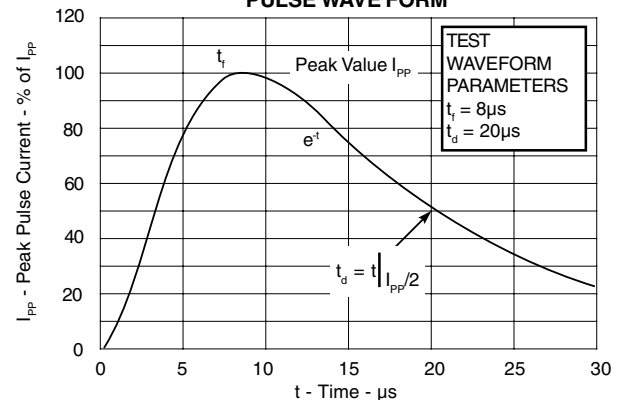
Note 1: Part numbers with an additional "C" suffix are bidirectional devices, i.e., GBLCS05C. For other voltages contact factory.

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

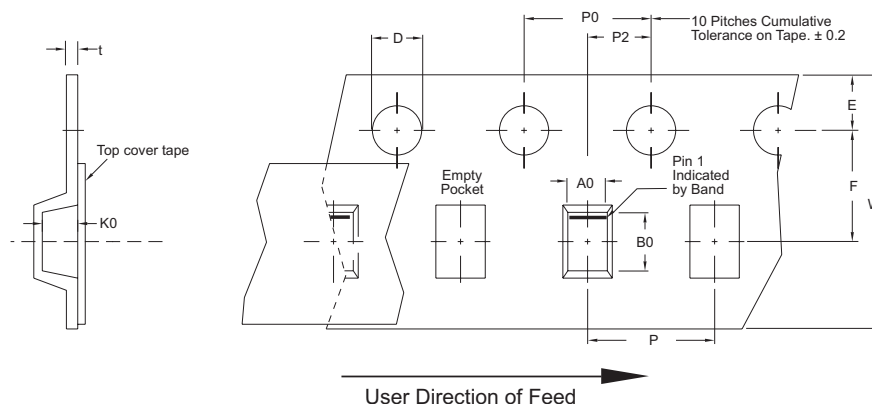
SC-79 PACKAGE OUTLINE & DIMENSIONS

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



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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