Features

- Glass Passivated Chip Junction
- High Surge Current Capability
- Epoxy Meets UL 94 V-0 Flammability Rating
- Lead Free Finish/Rohs Compliant (Note 1) ("P"Suffix Designates RoHS Compliant. See Ordering Information)
- Halogen Free Available Upon Request By Adding Suffix "-HF"
- UL Recognized File # E502650

4.0 Amp Glass Passivated Single-Phase Rectifiers 50 to 1000 Volts

Maximum Ratings

- Operating Junction Temperature Range: -55°C to +150°C
- Storage Temperature Range: -55°C to +150°C
- Typical Thermal Resistance : 22°C/W Junction to Ambient
- Typical Thermal Resistance : 3.5°C/W Junction to Lead

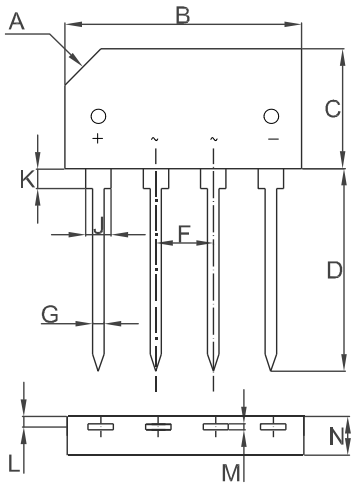
MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
GBL4005-BPC01	GBL4005	50V	35V	50V
GBL401-BPC01	GBL401	100V	70V	100V
GBL402-BPC01	GBL402	200V	140V	200V
GBL404-BPC01	GBL404	400V	280V	400V
GBL406-BPC01	GBL406	600V	420V	600V
GBL408-BPC01	GBL408	800V	560V	800V
GBL410-BPC01	GBL410	1000V	700V	1000V

Electrical Characteristics @ 25°C Unless Otherwise Specified

Maximum Average Forward Current	$I_{F(AV)}$	4.0A 3.0A	T_C= 50°C(2) T_A= 40°C(3)
Peak Forward Surge Current	I_{FSM}	150A	8.3ms, Half Sine
Rating for fusing	I^2t	93 A^2S	t<8.3ms
Maximum Instantaneous Forward Voltage	V_F	1.0V	I_{FM} = 2.0A; T_A = 25°C
Maximum DC Reverse Current At Rated DC Blocking Voltage	I_R	5.0μA 500μA	T_A = 25°C T_A = 125°C
Typical Junction Capacitance GBL4005-404 GBL406-410	C_J	95pF 40pF	Measured At 1.0MHz, V_R=4.0V

Note: 1. High Temperature Solder Exemption Applied, See EU Directive Annex Notes 7a
2. Unit Mounted On 3.0x3.0x0.11" Thick(7.5x7.5x0.3cm) Al. Plate.
3. Unit Mounted On P.C.B. At 0.375"(9.5mm) Lead Length And 0.5x0.5"(12x12mm) Copper Pads

GBL



DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.118 X 0.118		3.0 X 3.0		X 45°
B	0.756	0.835	19.20	21.20	
C	0.413	0.453	10.50	11.50	
D	0.512	0.591	13.00	15.00	
F	0.193	0.201	4.90	5.10	
G	0.039	0.047	1.00	1.20	
J	0.047	0.071	1.20	1.80	
K	0.079	0.118	2.00	3.00	
L	0.035	0.043	0.90	1.10	
M	0.020	0.027	0.50	0.70	
N	0.118	0.157	3.00	4.00	

Curve Characteristics

Fig. 1 - Forward Current Derating Curve

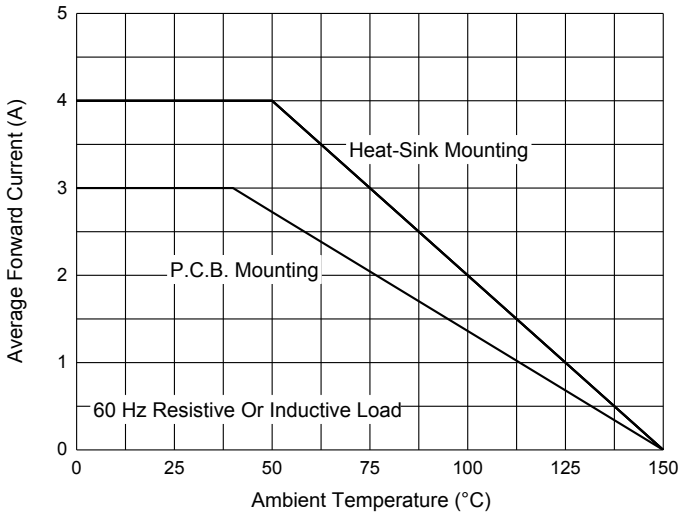


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

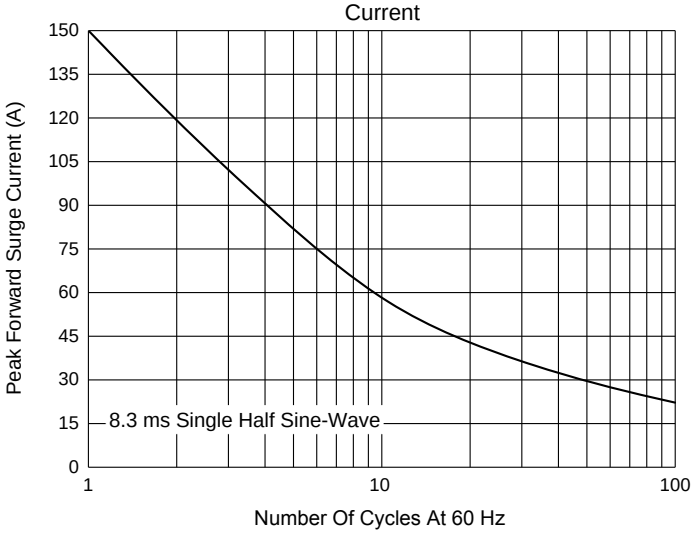


Fig. 3 - Typical Instantaneous Forward Characteristics

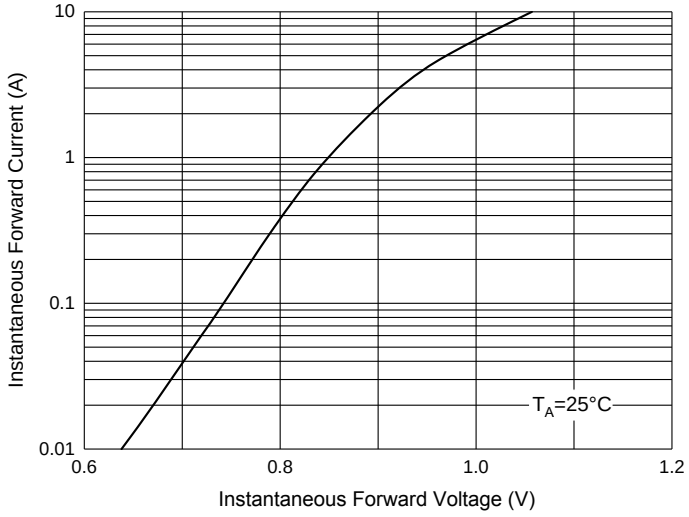


Fig. 4 - Typical Reverse Leakage Characteristics