

	E502650
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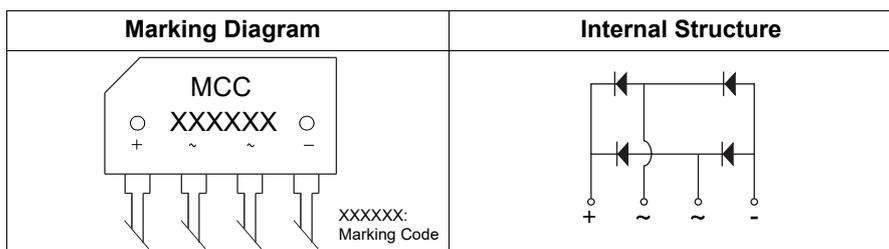
Features

- Halogen Free. "Green" Device (Note 1)
- Glass Passivated Chip Junction
- High Surge Forward Current Capability
- Epoxy Meets UL 94 V-0 Flammability Rating
- Lead Free Finish/RoHS Compliant (Note 2)("P" Suffix Designates RoHS Compliant. See Ordering Information)

Maximum Ratings @ 25°C (Unless Otherwise Specified)

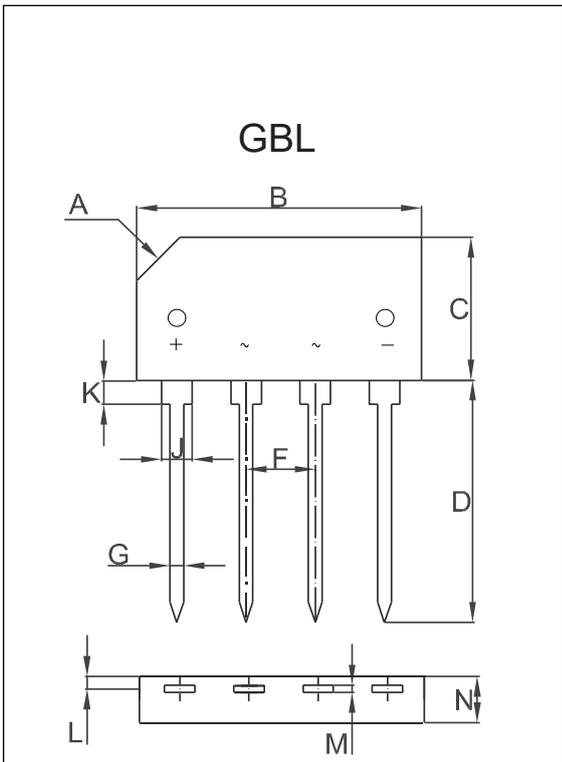
Parameter	Symbol	Value							Unit
		GBL 6005	GBL 601	GBL 602	GBL 604	GBL 606	GBL 608	GBL 610	
Peak Repetitive Reverse Voltage	V_{RRM}								V
Working Peak Reverse Voltage	V_{RWM}	50	100	200	400	600	800	1000	
DC Blocking Voltage	V_R								
RMS Reverse Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Average Rectified Forward Current @ $T_A=25^\circ\text{C}$	$I_{F(AV)}$	6							A
Non-Repetitive Peak Surge Current @ 8.3ms Half Sine Wave	I_{FSM}	150							A
Non-Repetitive Peak Surge Current @ 1ms Square Wave		250							
I^2t Rating for Fusing @ $1\text{ms} \leq t \leq 8.3\text{ms}$	I^2t	93							A^2s
Dielectric strength @ Terminals to Case, AC 1 Minute	V_{dis}	2							KV

Part Number	Marking Code
GBL6005	GBL6005
GBL601	GBL601
GBL602	GBL602
GBL604	GBL604
GBL606	GBL606
GBL608	GBL608
GBL610	GBL610



- Note:
1. Halogen free "Green" products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.
 2. High temperature solder exemption applied, see EU directive annex 7a.

6 Amp Bridge Rectifier 50 to 1000 Volts



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	

Thermal characteristics

Symbol	Parameter	Conditions	Min	Typ	Max	Unit
T_J	Operating Junction Temperature Range		-55		150	°C
T_{stg}	Storage Temperature Range		-55		150	°C
$R_{th(J-C)}$	Thermal Resistance from Junction to Case			8		°C/W
$R_{th(J-A)}$	Thermal Resistance from Junction to Ambient			40		°C/W

Electrical Characteristics @ 25°C Unless Otherwise Specified(Per Diode)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Forward Voltage	V_F	$I_F=3A; T_J=25^\circ C$			1.0	V
Reverse Current	I_R	at Rated $V_R; T_J=25^\circ C$ at Rated $V_R; T_J=125^\circ C$			5 100	μA
Junction Capacitance	C_J	$V_R=4V; f=1MHz; T_J=25^\circ C$		42		pF

Curve Characteristics

Fig. 1 - Forward Current Derating Curve

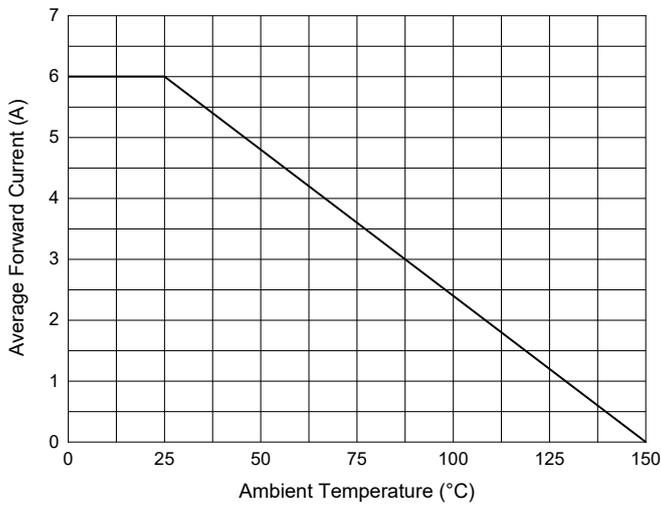


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

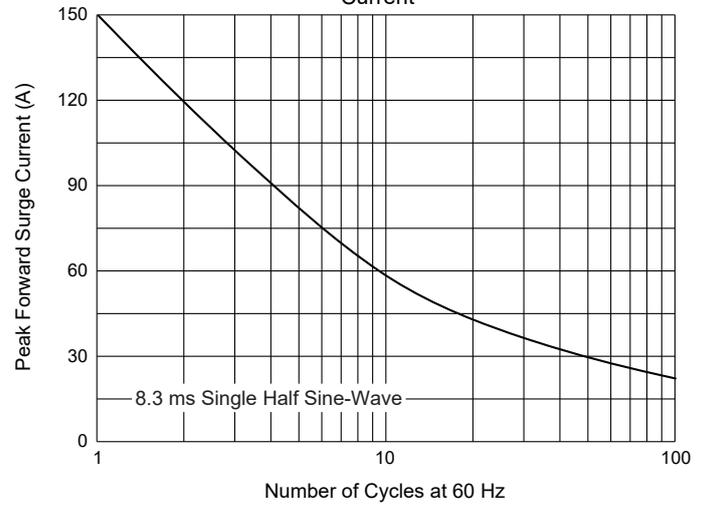


Fig. 3 - Typical Forward Characteristics

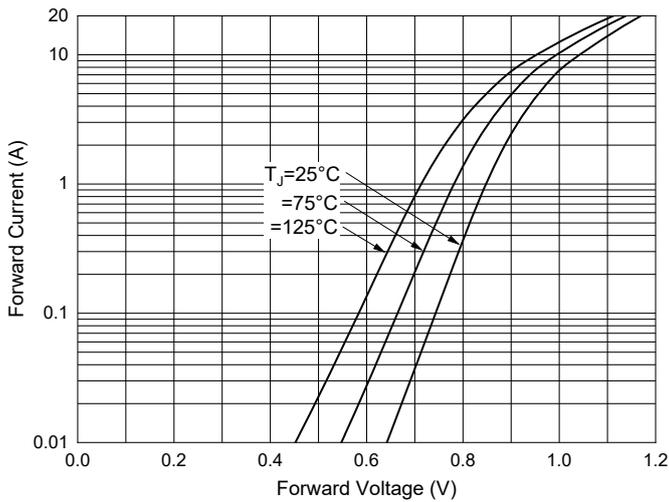


Fig. 4 - Typical Reverse Leakage Characteristics

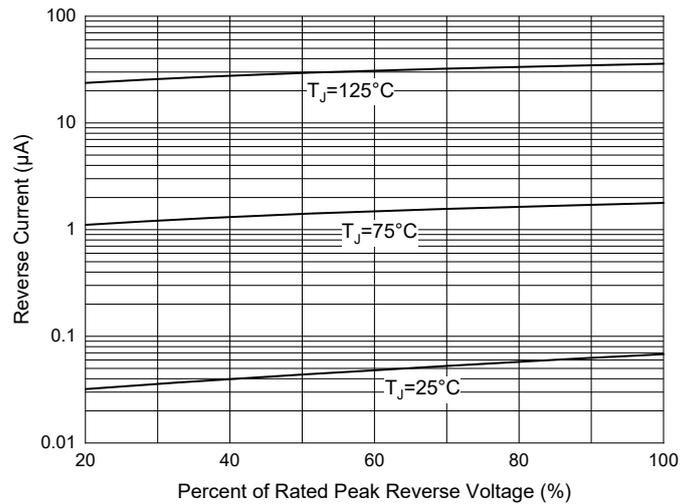
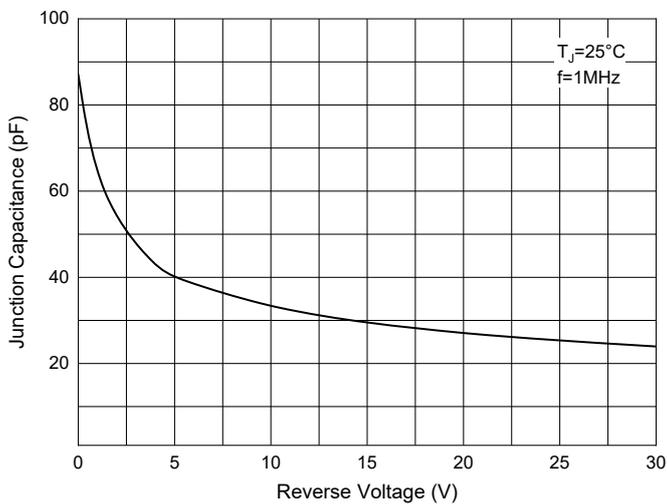


Fig. 5 - Typical Capacitance Characteristics



Ordering Information

Device	Packing
Part Number-BP	Bulk:22pcs/Tube,1100pcs/Box,4400pcs/Carton

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