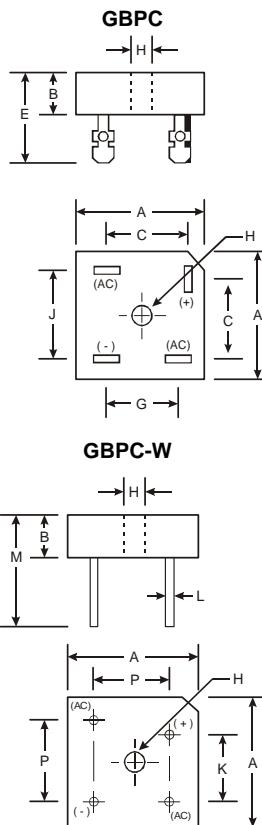


Features

- Glass Passivated Die Construction
- Low Reverse Leakage Current
- Low Power Loss, High Efficiency
- Surge Overload Rating to 300A Peak
- Electrically Isolated Metal Base for Maximum Heat Dissipation
- Case to Terminal Isolation Voltage 1500V
- UL Listed Under Recognized Component Index, File Number E94661
- Lead Free Finish, RoHS Compliant (Date Code 0514+) (Note 4)

Mechanical Data

- Case: GBPC/GBPC-W
- Case Material: Molded Plastic with Heatsink Internally Mounted in the Bridge Encapsulation. UL Flammability Classification Rating 94V-0
- Moisture Sensitivity: Level 1 per J-STD-020D
- Terminals: Finish — Silver. Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: As Marked on Case
- Mounting: Through Hole for #10 Screw
- Mounting Torque: 8.0 Inch-pounds Maximum
- Ordering Information: See Page 3
- Marking: Type Number
- GBPC Weight: 20 grams (approximate)
- GBPC-W Weight: 14 grams (approximate)



GBPC / GBPC-W		
Dim	Min	Max
A	28.30	28.80
B	7.40	8.25
C	16.10	17.10
E	18.80	21.30
G	13.80	14.80
H	Hole for #10 screw	
	5.08Ø	5.59Ø
J	17.60	18.60
K	10.90	11.90
L	0.97Ø	1.07Ø
M	31.80	—
P	17.60	18.60

All Dimensions in mm

"W" Suffix Designates Wire Leads
No Suffix Designates Faston Terminals

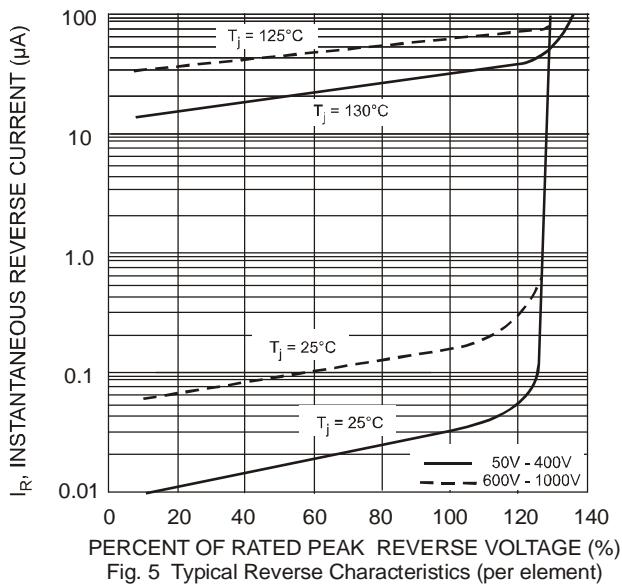
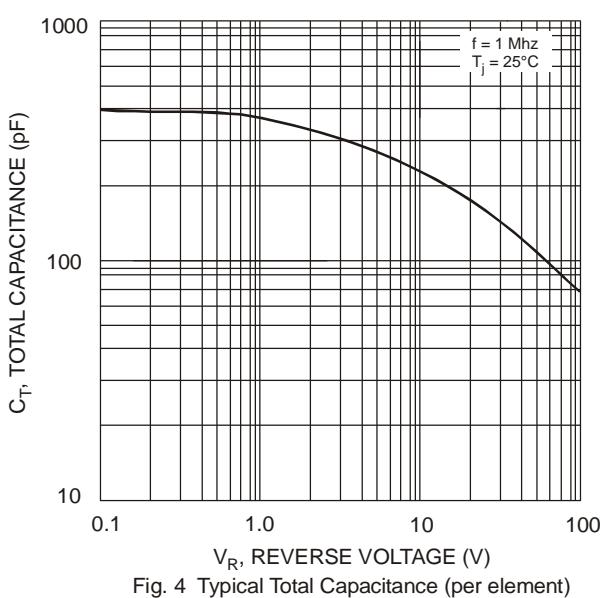
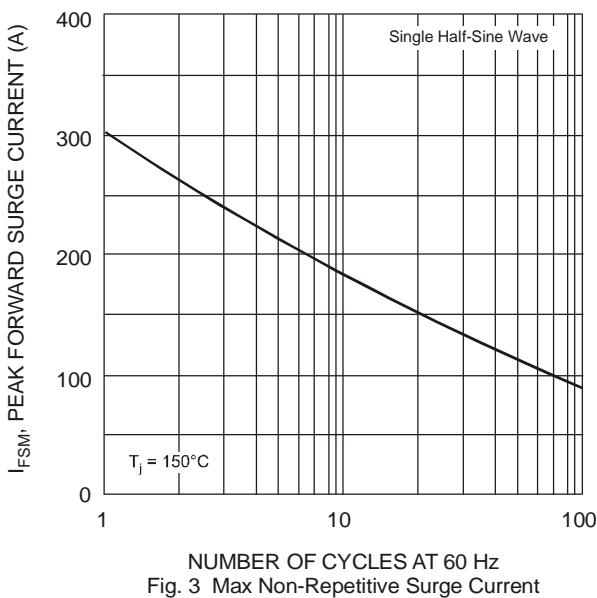
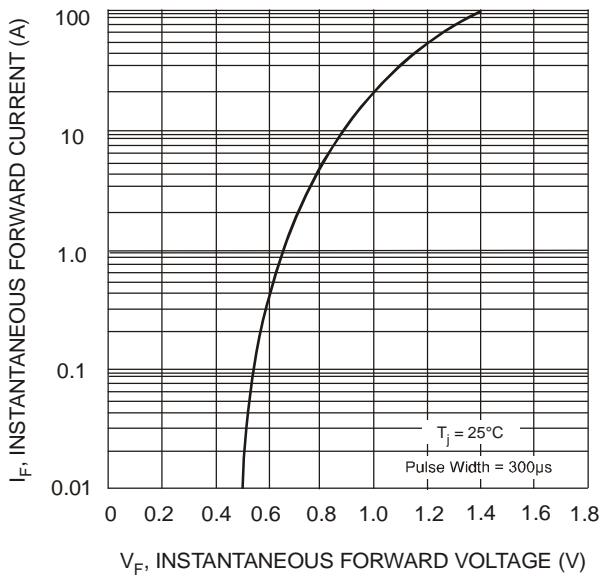
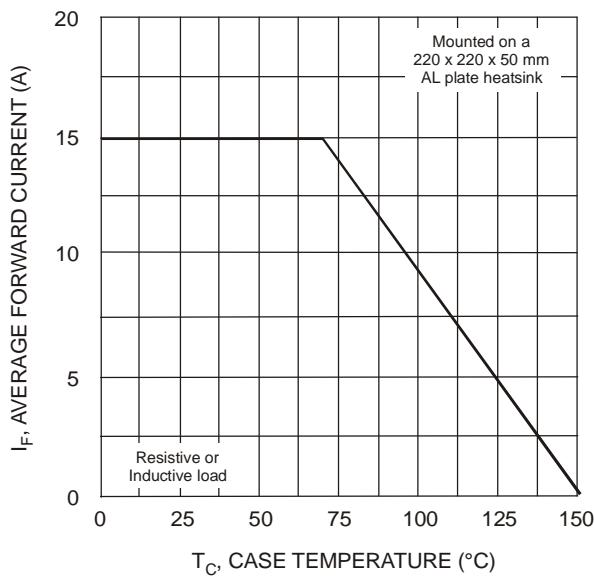
Maximum Ratings and Electrical Characteristics

$\text{@ } T_A = 25^\circ\text{C}$ unless otherwise specified

Single phase, half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

Characteristic	Symbol	GBPC15 005/W	GBPC15 01/W	GBPC15 02/W	GBPC15 04/W	GBPC15 06/W	GBPC15 08/W	GBPC15 10/W	Unit
Peak Repetitive Reverse Voltage	V_{RRM}								
Working Peak Reverse Voltage	V_{RWM}	50	100	200	400	600	800	1000	V
DC Blocking Voltage	V_R								
RMS Reverse Voltage	$V_R(\text{RMS})$	35	70	140	280	420	560	700	V
Average Rectified Output Current @ $T_C = 70^\circ\text{C}$	I_O				15				A
Non-Repetitive Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load	I_{FSM}				300				A
Forward Voltage (per element) @ $I_F = 7.5\text{A}$	V_{FM}				1.1				V
Peak Reverse Current @ $T_C = 25^\circ\text{C}$ at Rated DC Blocking Voltage @ $T_C = 125^\circ\text{C}$	I_R				5.0	500			μA
I^2t Rating for Fusing (Note 1)	I^2t				374				A^2s
Typical Total Capacitance (Note 2)	C_T				300				pF
Typical Thermal Resistance (Note 3)	$R_{\theta JC}$				5.0				$^\circ\text{C/W}$
Operating and Storage Temperature Range	T_J, T_{STG}				-65 to +150				$^\circ\text{C}$

- Notes:
1. Non-repetitive, for $t > 1.0\text{ms}$ and $t < 8.3\text{ms}$.
 2. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.
 3. Thermal resistance junction to case mounted on heatsink.
 4. EU Directive 2002/95/EC (RoHS). All applicable RoHS exemptions applied. Please visit our website at http://www.diodes.com/products/lead_free.html.



Ordering Information (Note 5)

Device	Packaging	Shipping
GBPC15005	GBPC	100/Tray
GBPC1501	GBPC	100/Tray
GBPC1502	GBPC	100/Tray
GBPC1504	GBPC	100/Tray
GBPC1506	GBPC	100/Tray
GBPC1508	GBPC	100/Tray
GBPC1510	GBPC	100/Tray
GBPC15005W	GBPC-W	100/Tray
GBPC1501W	GBPC-W	100/Tray
GBPC1502W	GBPC-W	100/Tray
GBPC1504W	GBPC-W	100/Tray
GBPC1506W	GBPC-W	100/Tray
GBPC1508W	GBPC-W	100/Tray
GBPC1510W	GBPC-W	100/Tray

Notes: 5. For packaging details, go to our website at <http://www.diodes.com/datasheets/ap02008.pdf>.

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[GBPC1504W](#) [GBPC1506](#) [GBPC1506W](#) [GBPC1508](#) [GBPC1508W](#) [GBPC1510W](#)