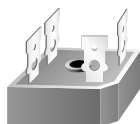




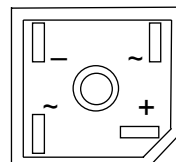
## GBPC 12, 15, 25, 35 SERIES

### Features

- Integrally molded heatsink provided very low thermal resistance for maximum heat dissipation.
- Surge overload ratings from 300 amperes to 400 amperes.
- Isolated voltage from case to lead over 2500 volts.
- UL certified, UL #E96005.

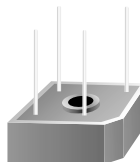


GBPC

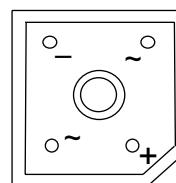


### Suffix "W"

Wire Lead Structure



GBPC-W



### Suffix "M"

Terminal Location  
Face to Face

## Bridge Rectifiers (Glass Passivated)

### Absolute Maximum Ratings\*

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

Symbol	Parameter	Value							Units	
		005	01	02	04	06	08	10		
$V_{RRM}$	Maximum Repetitive Reverse Voltage	50	100	200	400	600	800	1000	V	
$V_{RMS}$	Maximum RMS Bridge Input Voltage	35	70	140	280	420	560	700	V	
$V_R$	DC Reverse Voltage (Rated $V_R$ )	50	100	200	400	600	800	1000	V	
$I_{F(AV)}$	Average Rectified Forward Current @ $T_A = 55^\circ\text{C}$								A	
		<b>GBPC12</b>							12	
		<b>GBPC15</b>							15	
		<b>GBPC25</b>							25	
<b>GBPC35</b>							35	A		
$I_{FSM}$	Non-repetitive Peak Forward Surge Current 8.3 ms Single Half-Sine-Wave	<b>GBPC12, 15, 25</b>							300	A
		<b>GBPC35</b>							400	A
$T_{stg}$	Storage Temperature Range	-55 to +150							$^\circ\text{C}$	
$T_J$	Operating Junction Temperature	-55 to +150							$^\circ\text{C}$	

\*These ratings are limiting values above which the serviceability of any semiconductor device may be impaired.

# Bridge Rectifiers (Glass Passivated)

(continued)

GBPC 12, 15, 25, 35 SERIES

## Thermal Characteristics

Symbol	Parameter	Value	Units
$P_D$	Power Dissipation	83.3	W
$R_{\theta JL}$	Thermal Resistance, Junction to Lead	1.5	$^{\circ}C/W$

## Electrical Characteristics

$T_A = 25^{\circ}C$  unless otherwise noted

Symbol	Parameter	Device	Units
$V_F$	Forward Voltage Drop, per bridge @ 6.0 A <b>GBPC12</b> @ 7.5 A <b>GBPC15</b> @ 12.5 A <b>GBPC25</b> @ 17.5 A <b>GBPC35</b>	1.1	V
$I_R$	Reverse Current, per leg @ rated $V_R$ $T_A = 25^{\circ}C$ $T_A = 125^{\circ}C$	5.0 500	$\mu A$ $\mu A$
	$I^2t$ rating for fusing $t < 8.3$ ms <b>GBPC12, 15, 25</b> <b>GBPC35</b>	375 660	$A^2Sec$ $A^2Sec$
$C_T$	Total Capacitance, per leg $V_R = 4.0$ V, <b>GBPC12, 15, 25</b> $f = 1.0$ MHz <b>GBPC35</b>	180 200	pF pF

## Typical Characteristics

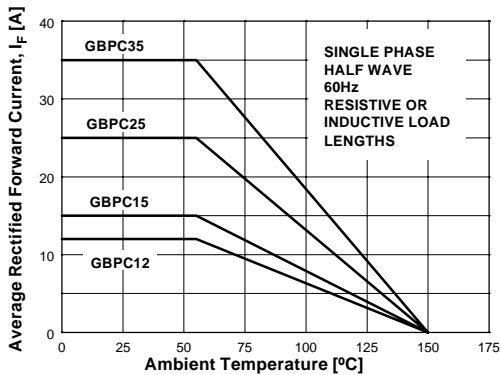


Figure 1. Forward Current Derating Curve

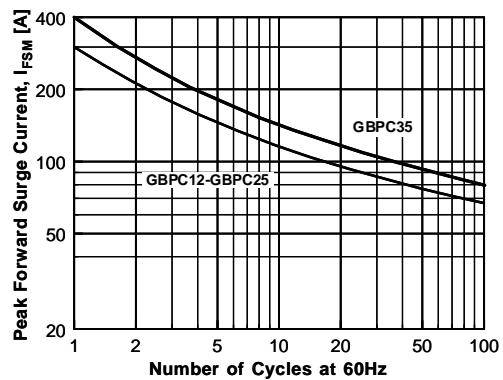


Figure 2. Non-Repetitive Surge Current

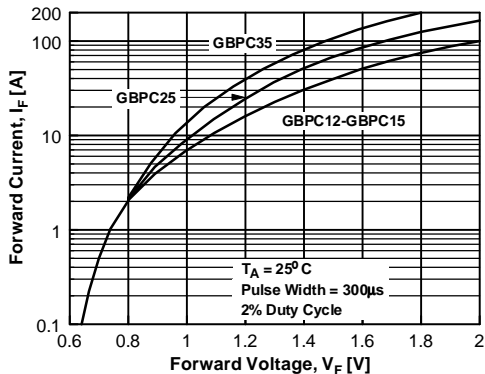


Figure 3. Forward Voltage Characteristics

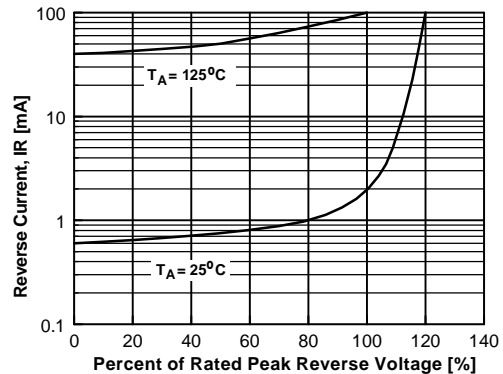


Figure 4. Reverse Current vs Reverse Voltage

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