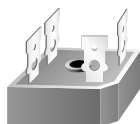




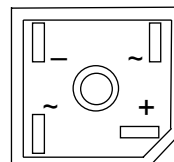
GBPC 12, 15, 25, 35 SERIES

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.

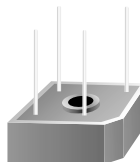


GBPC

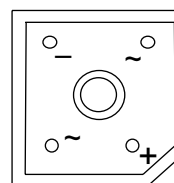


Suffix "W"

Wire Lead Structure



GBPC-W



Suffix "M"

Terminal Location
Face to Face

Bridge Rectifiers (Glass Passivated)

Absolute Maximum Ratings*

T_A = 25°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°C								A	
		GBPC12							12	
		GBPC15							15	
		GBPC25							25	
GBPC35							35			
I _{FSM}	Non-repetitive Peak Forward Surge Current 8.3 ms Single Half-Sine-Wave	GBPC12, 15, 25							300	A
		GBPC35							400	A
T _{stg}	Storage Temperature Range	-55 to +150							°C	
T _J	Operating Junction Temperature	-55 to +150							°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	°C/W

Electrical Characteristics

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

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

Typical Characteristics

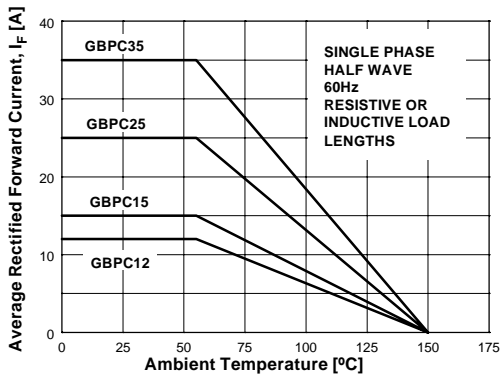


Figure 1. Forward Current Derating Curve

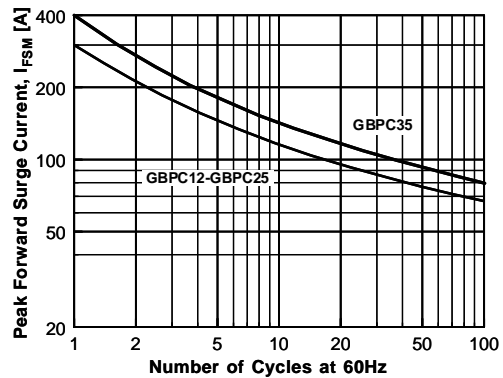


Figure 2. Non-Repetitive Surge Current

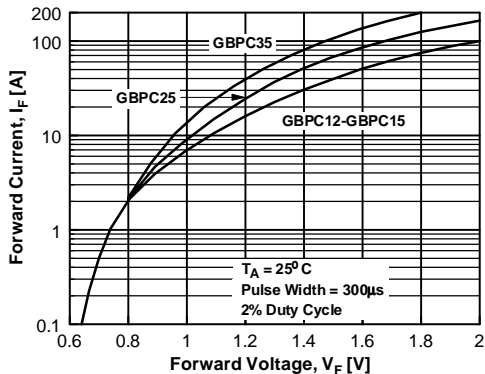


Figure 3. Forward Voltage Characteristics

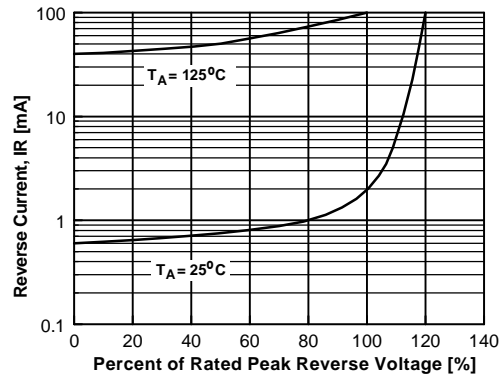


Figure 4. Reverse Current vs Reverse Voltage

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