

GBPC 12, 15, 25, 35 SERIES

Features

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



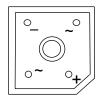
GBPC



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		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 GBPC12 GBPC15 GBPC25 GBPC35				12 15 25 35				A A A
I _{FSM}	Non-repetitive Peak Forward Surge Current GBPC12, 15, 25 8.3 ms Single Half-Sine-Wave GBPC35		300 400					A A	
T _{stq}	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)

Thermal Characteristics

Symbol	Parameter	Value	Units	
P_{D}	Power Dissipation	83.3	W	
R _{eJL}	Thermal Resistance, Junction to Lead	1.5	°C/W	

Electrical Characteristics	T _A = 25°C unless otherwise noted
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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 $T_A = 25^{\circ}C$ $T_A = 125^{\circ}C$	5.0 500	μΑ μΑ
	I ² t rating for fusing t < 8.3 ms GBPC12, 15, 25 GBPC35	375 660	A ² Sec A ² Sec
Ст		180 200	pF pF

Typical Characteristics

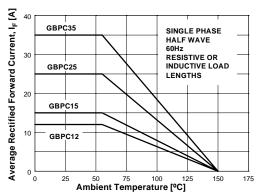
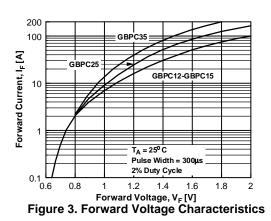


Figure 1. Forward Current Derating Curve



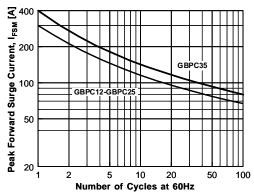


Figure 2. Non-Repetitive Surge Current

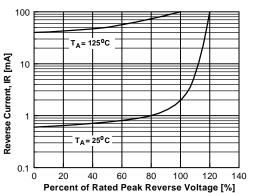


Figure 4. Reverse Current vs Reverse Voltage

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