

GBPC35005/W - GBPC3510/W

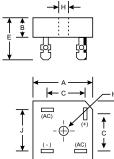
35A GLASS PASSIVATED BRIDGE RECTIFIER

Features

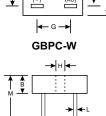
- Glass Passivated Die Construction
- Diffused Junction
- Low Reverse Leakage Current
- Low Power Loss, High Efficiency
- Surge Overload Rating to 400A Peak
- Electrically Isolated Metal Base for Maximum Heat Dissipation
- Case to Terminal Isolation Voltage 1500V
- UL Listed Under Recognized Component Index, File Number E94661

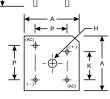
Mechanical Data

- Case: Molded Plastic with Heatsink Internally Mounted in the Bridge Encapsulation
- Terminals: 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
- GBPC Weight: 20 grams (approx.)
- GBPC-W Weight: 14 grams (approx.)
- Mounting Position: Any



GBPC





GBPC / GBPC-W							
Dim	Min	Max					
Α	28.30	28.80					
В	7.40	8.25					
С	16.10	17.10					
E	18.80	21.30					
G	13.80	14.80					
н	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	_					
Р	17.60	18.60					
All Dimensions in mm							

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

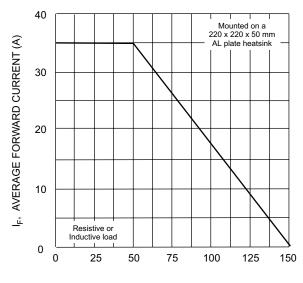
Maximum Ratings and Electrical Characteristics @ TA = 25°C unless otherwise specified

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

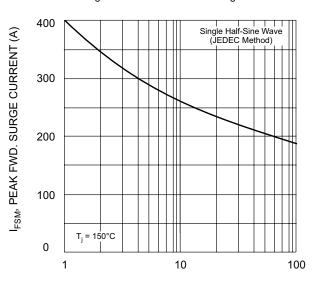
Characteristic		Symbol	GBPC35 005/W	GBPC35 01/W	GBPC35 02/W	GBPC35 04/W	GBPC35 06/W	GBPC35 08/W	GBPC35 10/W	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage		V _{RRM} V _{RWM} V _R	50	100	200	400	600	800	1000	>
RMS Reverse Voltage		V _{R(RMS)}	35	70	140	280	420	560	700	V
Average Rectified Output Current	@ T _C = 50°C	I _O	35						Α	
Non-Repetitive Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)		I _{FSM}	400						Α	
Forward Voltage (per element)	@ I _F = 17.5A	V _{FM}	1.1					٧		
Peak Reverse Current at Rated DC Blocking Voltage	@ T _C = 25°C @ T _C = 125°C	I _R	5.0 500				μА			
I ² t Rating for Fusing	(Note 1)	I ² t	660					A ² s		
Typical Junction Capacitance	(Note 2)	Cj				300				pF
Typical Thermal Resistance per leg	(Note 3)	$R_{\theta JC}$				1.2				°C/W
Operating and Storage Temperature Range		T _{j,} T _{STG}	-65 to +150							°C

Notes: 1. Non-repetitive, for t > 1.0ms and t < 8.3ms.

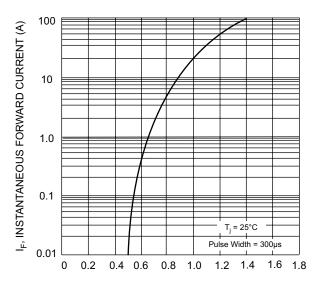
- 2. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.
- 3. Thermal resistance junction to case mounted on heatsink.



 T_C , CASE TEMPERATURE (°C) Fig. 1 Forward Current Derating Curve



NUMBER OF CYCLES AT 60 Hz Fig. 3 Max Non-Repetitive Surge Current



 V_{F} , INSTANTANEOUS FORWARD VOLTAGE (V) Fig. 2 Typical Forward Characteristics (per element)

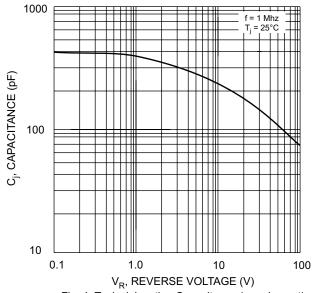


Fig. 4 Typical Junction Capacitance (per element)

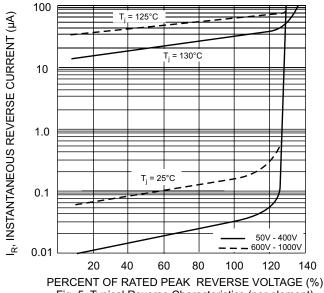


Fig. 5 Typical Reverse Characteristics (per element)