

GBPC25005/W - GBPC2510/W

Features

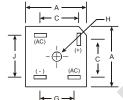
- Glass Passivated Die Construction
- Low Reverse Leakage Current
- Low Power Loss, High Efficiency
- Surge Overload Rating to 300A Peak
- Metal Base for Maximum Heat Dissipation
- Case to Terminal Isolation Voltage 1500V
- UL Listed Under Recognized Component Index, File Number E94661
- Lead Free Finish,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

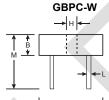
Mechanical Data

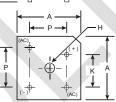
- Case: GBPC / GBPC-W
- Case Material: Molded Plastic with Heatsink Internally Mounted in the Bridge Encapsulation. UL Flammability Classification Rating 94V-0
- Moisture Sensitivity: Level 1 per J-STD-020C
- Terminals: Finish Silver. Plated Leads Solderable per MIL-STD-202, Method 208 @3
- Polarity: 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 / GBPC-W					
Dim	Min	Max			
Α	28.30	28.80			
В	7.40	8.25			
O	16.10	17.10			
Ħ	18.80	21.30			
O	13.80	14.80			
Н	Hole for #10 screw				
	5.08∅	5.59Ø			
7	17.60	18.60			
K	10.90	11.90			
L	0.97∅	1.07∅			
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

@T_A = 25°C unless otherwise specified

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

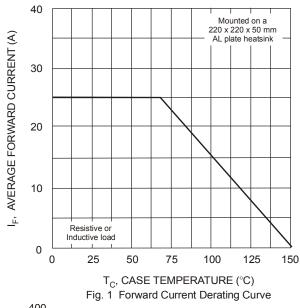
Characteristic	Symbol	GBPC25 005/W	GBPC25 01/W	GBPC25 02/W	GBPC25 04/W	GBPC25 06/W	GBPC25 08/W	GBPC25 10/W	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V _{RRM} V _{RWM} V _R	50	100	200	400	600	800	1000	٧
RMS Reverse Voltage	V _{R(RMS)}	35	70	140	280	420	560	700	V
Average Rectified Output Current @ T _C = 60°C	Io	I _O 25					Α		
Non-Repetitive Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load	I _{FSM}				300				А
Forward Voltage (per element) @ I _F = 12.5A	V _{FM}	1.1				V			
Peak Reverse Current @ $T_C = 25^{\circ}C$ at Rated DC Blocking Voltage @ $T_C = 125^{\circ}C$	I In	I _R 5.0 500				μА			
I ² t Rating for Fusing (Note 1)	l ² t	l ² t 374				A^2s			
Typical Total Capacitance (Note 2)	C _T	C _T 300				pF			
Typical Thermal Resistance per Leg (Note 3)		1.3					°C/W		
Operating and Storage Temperature Range	T _{j,} T _{STG}	-65 to +150					°C		

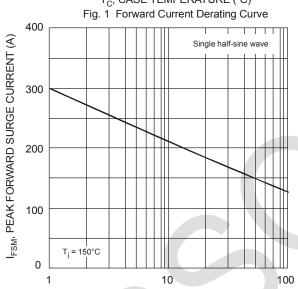
Notes:

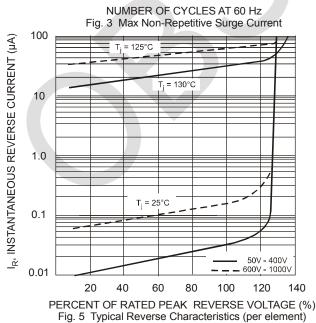
- Non-repetitive, for t > 1.0ms and t < 8.3ms.
- Measured at 1.0MHz and applied reverse voltage of 4.0V DC.
- Thermal resistance junction to case mounted on heatsink.
- RoHS revision 13.2.2003. Glass and high temperature solder exemptions applied, see EU Directive Annex Notes 5 and 7.

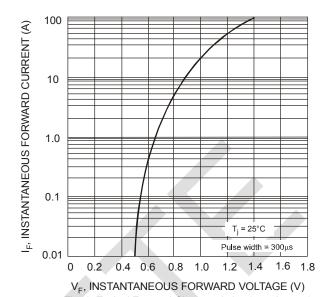












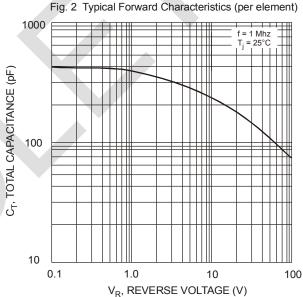


Fig. 4 Typical Total Capacitance (per element)

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Ordering Information (Note 5)

Device	Packaging	Shipping		
GBPC25005	GBPC	100/Tray		
GBPC2501	GBPC	100/Tray		
GBPC2502	GBPC	100/Tray		
GBPC2504	GBPC	100/Tray		
GBPC2506	GBPC	100/Tray		
GBPC2508	GBPC	100/Tray		
GBPC2510	GBPC	100/Tray		
GBPC25005W	GBPC-W	100/Tray		
GBPC2501W	GBPC-W	100/Tray		
GBPC2502W	GBPC-W	100/Tray		
GBPC2504W	GBPC-W	100/Tray		
GBPC2506W	GBPC-W	100/Tray		
GBPC2508W	GBPC-W	100/Tray		
GBPC2510W	GBPC-W	100/Tray		

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

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