GBPC2500 THRU GBPC2516

25A GLASS PASSIVATED SINGLE-PHASE BRIDGE RECTIFIER



Features

- **Glass Passivated Die Construction**
- Low Reverse Leakage Current
- Low Power Loss, High Efficiency
- Electrically Isolated Epoxy Case for Maximum Heat Dissipation
- Case to Terminal Isolation Voltage 2500V

Mechanical Data

- Case: Molded Plastic with Heatsink, Available in Both Low Profile and Standard Case
- Terminals: Plated Faston Lugs or Wire Leads, Add "W" Suffix to Indicate Wire Leads
- Polarity: As Marked on Case
- Mounting: Through Hole with #10 Screw
- Mounting Torque: 23 cm-kg (20 in-lbs) Max.
- Weight: 21 grams (GBPC); 18 grams (GBPC-W)
- Marking: Type Number
- Lead Free: For RoHS / Lead Free Version



GBPC

GBPC-W

	GB Low Profile	PC / Standard	GBPC-W Low Profile / Standard							
Dim	Min	Max	Min	Max						
Α	28.40	28.70	28.40	28.70						
В	7.50 / 10.97	8.50 / 11.23	7.50 / 10.97	8.50 / 11.23						
С	15.70	16.70	17.10	19.10						
D	17.50	18.50	10.90	11.90						
E	19.08 / 22.86	21.58 / 25.40	30.50	—						
G	Hole for #10 screw, 5.08Ø Nominal									
Н	6.35 T	⁻ ypical	0.97Ø	1.07Ø						
All Dimension in mm										

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%.

Ch avagtariatia	Symbol	GBPC25										11
Characteristic		00	01	02	04	06	08	10	12	14	16	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	Vrrm Vrwm Vr	50	100	200	400	600	800	1000	1200	1400	1600	V
RMS Reverse Voltage	VR(RMS)	35	70	140	280	420	560	700	840	980	1120	V
Average Rectified Output Current @T _c = 50° C	lo	25										А
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	IFSM	300										A
Forward Voltage per leg $@I_F = 12.5A$	Vfm	1.1									V	
Peak Reverse Current $@T_c = 25^{\circ}C$ At Rated DC Blocking Voltage $@T_c = 125^{\circ}C$	Irm	5.0 500									μΑ	
I ² t Rating for Fusing (t < 8.3ms)	l ² t	375									A²s	
Typical Junction Capacitance (Note 1)	Cj	300									pF	
Typical Thermal Resistance per leg (Note 2)	R	1.9									°C/W	
RMS Isolation Voltage from Case to Leads	Viso	2500									V	
Operating and Storage Temperature Range	Tj, TSTG	-65 to +150										°C

Note: 1. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.

2. Mounted on 127 x 152 x 124mm Al. finned plate.

