

Features

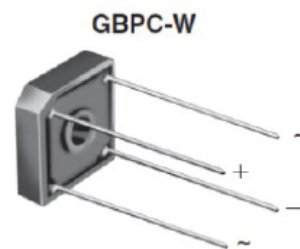
- Universal 3-way terminals: snap-on, wire wrap-around, or PCB mounting
- High surge current capability
- Low thermal resistance
- Solder dip 275 °C max. 7 s, per JESD 22-B106

Typical Applications

General purpose use in AC/DC bridge full wave rectification for power supply, home appliances, office equipment, industrial automation applications.

Mechanical Data

- **Package:** GBPC
Molding compound meets UL 94 V-0 flammability rating, RoHS- compliant
- **Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102



■ Maximum Ratings ($T_a=25^\circ\text{C}$ Unless otherwise specified)

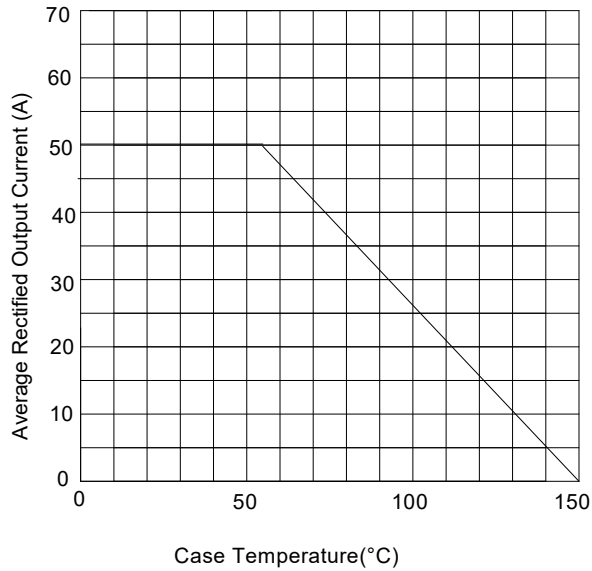
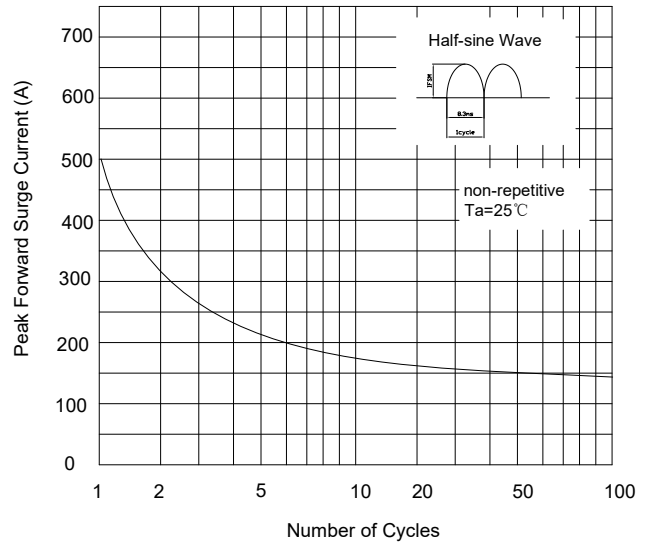
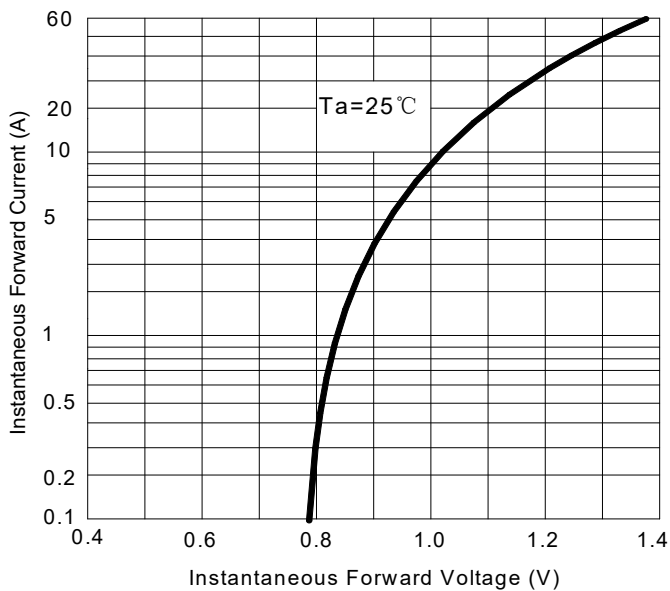
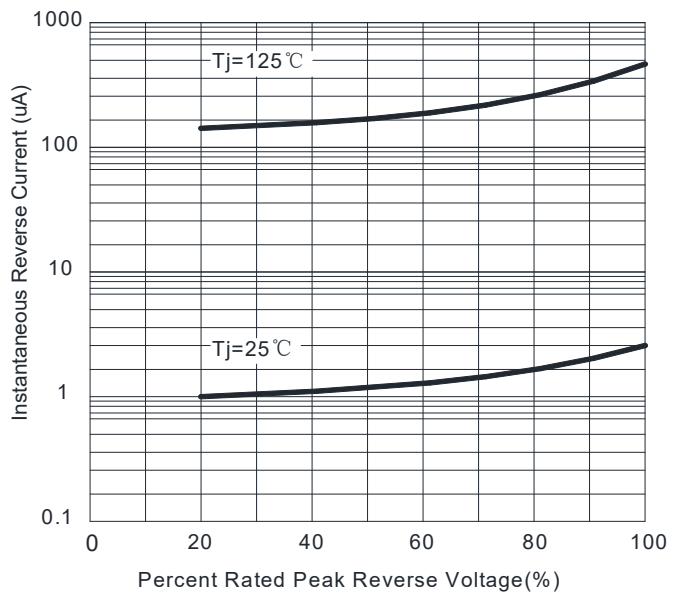
PARAMETER	SYMBOL	GBPC50005	GBPC5001	GBPC5002	GBPC5004	GBPC5006	GBPC5008	GBPC5010	UNIT
Device marking code		GBPC50005	GBPC5001	GBPC5002	GBPC5004	GBPC5006	GBPC5008	GBPC5010	
Repetitive Peak Reverse Voltage	V _{RRM}	50	100	200	400	600	800	1000	V
Average Rectified Output Current @60Hz sine wave, R-load, With heatsink T _c =55°C	I _O	50							A
Surge(Non-repetitive)Forward Current @60Hz Half-sine Wave, 1 cycle, T _a =25°C	I _{FSM}	500							A
Current Squared Time @1ms≤t<8.3ms T _J =25°C, Rating of per diode	I ² t	1040							A ² S
Storage Temperature	T _{stg}	-55 ~+150							°C
Junction Temperature	T _j	-55 ~+150							°C
Dielectric Strength, Terminals to case · AC 1 minute	V _{dis}	2.5							KV
Mounting Torque	TOR	10							kg·cm

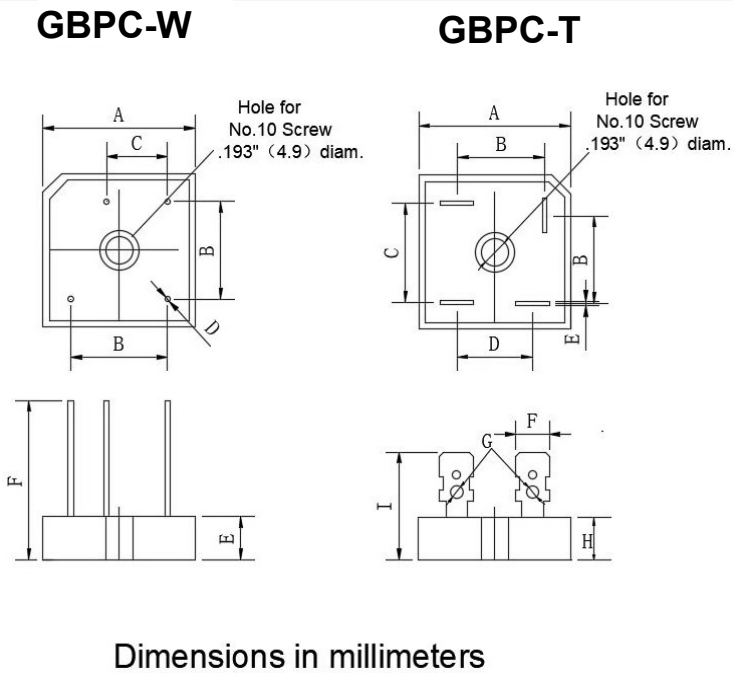
■ Electrical Characteristics ($T_a=25^\circ\text{C}$ Unless otherwise specified)

PARAMETER	SYMBOL	TEST CONDITIONS	GBPC50005	GBPC5001	GBPC5002	GBPC5004	GBPC5006	GBPC5008	GBPC5010	UNIT
Maximum instantaneous forward voltage drop per diode	V _{FM}	I _{FM} =25A	1.1							V
Maximum DC reverse current at rated DC blocking voltage per diode	I _{RRM}	V _{RM} =V _{RRM}	10							μA

■ Thermal Characteristics ($T_a=25^\circ\text{C}$ Unless otherwise specified)

PARAMETER	SYMBOL	GBPC50005	GBPC5001	GBPC5002	GBPC5004	GBPC5006	GBPC5008	GBPC5010	UNIT
Thermal Resistance Between junction and case, With heatsink	R _{θj-c}	0.95							°C/W

■ Characteristics (Typical)
FIG1: I_o-T_c Curve

FIG2 : Surge Forward Current Capability

FIG3 : Instantaneous Forward Voltage

FIG4 : Typical Reverse Characteristics


Outline Dimensions


GBPC-W		
Dim	Min	Max
A	28.2	28.8
B	17.1	19.1
C	10.4	12.4
D	0.95	1.05
E	7.6	8.2
F	30	/

GBPC-T		
Dim	Min	Max
A	28.2	28.8
B	15.3	17.3
C	17.1	19.1
D	13.2	15.2
E	0.75	0.85
F	6.2	6.4
G	2.2	2.6
H	7.6	8.2
I	19	/

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