

### Features

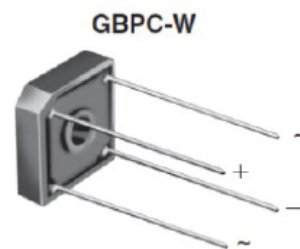
- Universal 3-way terminals: snap-on, wire wrap-around, or PCB mounting
- High surge current capability
- Low thermal resistance
- Solder dip 275 °C max. 7 s, per JESD 22-B106

### 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)

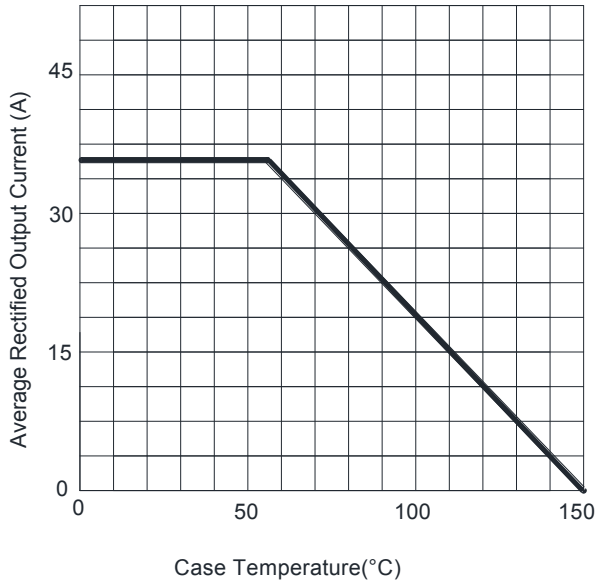
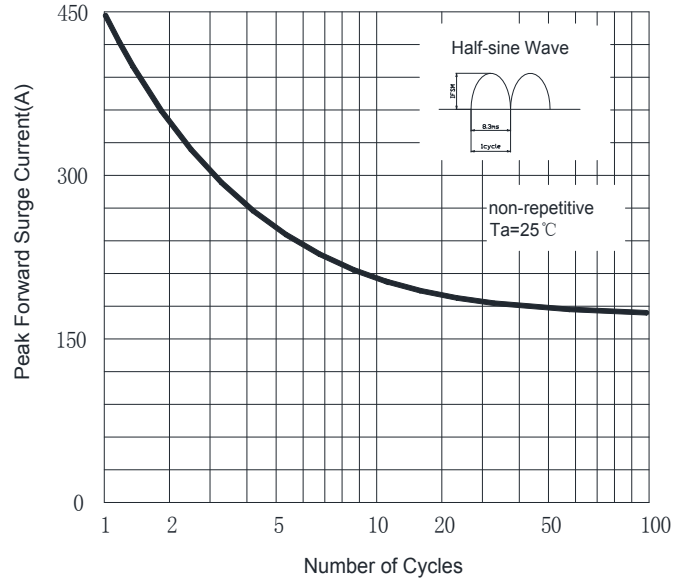
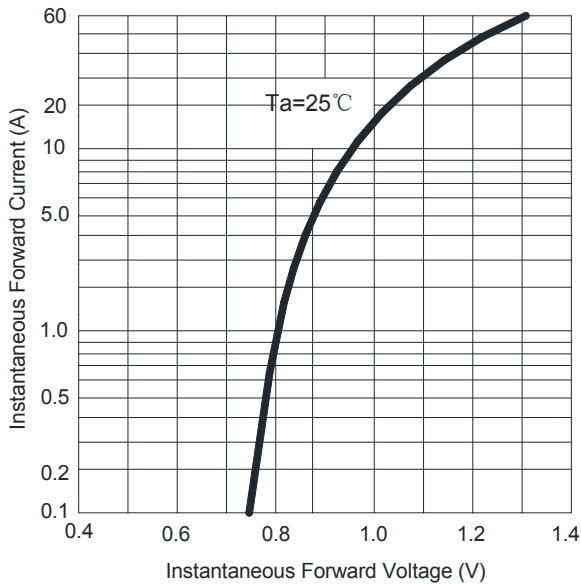
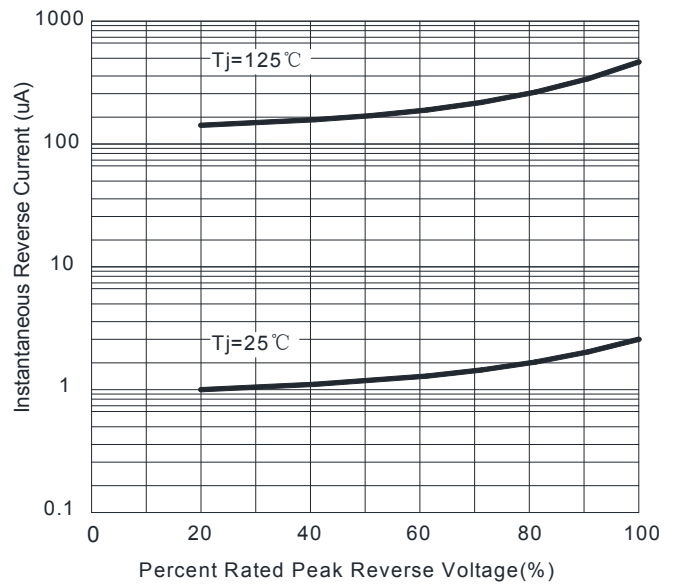
PARAMETER	SYMBOL	GBPC35005	GBPC3501	GBPC3502	GBPC3504	GBPC3506	GBPC3508	GBPC3510	UNIT
Device marking code		GBPC35005	GBPC3501	GBPC3502	GBPC3504	GBPC3506	GBPC3508	GBPC3510	
Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	50	100	200	400	600	800	1000	V
Average Rectified Output Current @60Hz sine wave, R-load, With heatsink T <sub>c</sub> =55°C	I <sub>O</sub>	35							A
Surge(Non-repetitive)Forward Current @60Hz Half-sine Wave, 1 cycle, T <sub>a</sub> =25°C	I <sub>FSM</sub>	450							A
Current Squared Time @1ms≤t<8.3ms T <sub>j</sub> =25°C, Rating of per diode	I <sup>2</sup> t	841							A <sup>2</sup> S
Storage Temperature	T <sub>stg</sub>	-55 ~+150							°C
Junction Temperature	T <sub>j</sub>	-55 ~+150							°C
Dielectric Strength, Terminals to case · AC 1 minute	V <sub>dis</sub>	2.5							KV
Mounting Torque	TOR	8							kg·cm

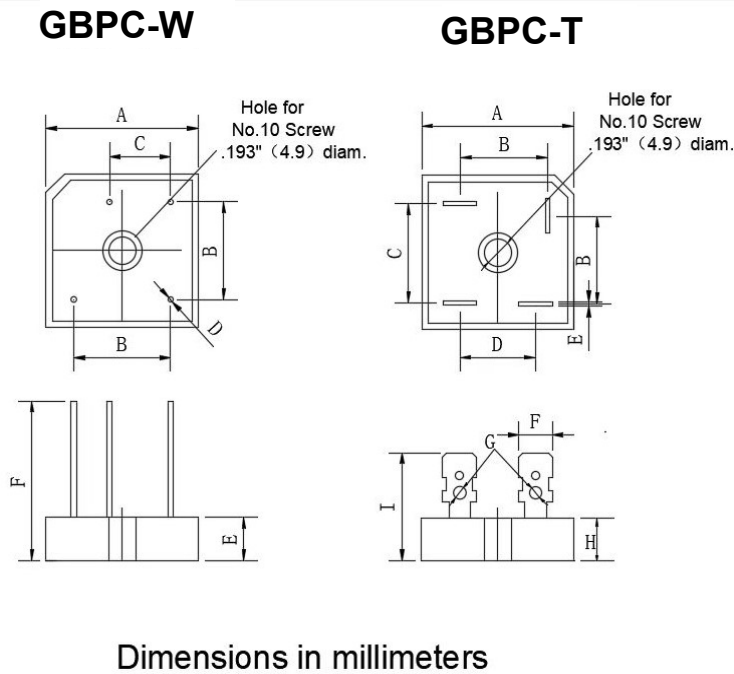
### ■ Electrical Characteristics ( $T_a=25^\circ\text{C}$ Unless otherwise specified)

PARAMETER	SYMBOL	TEST CONDITIONS	GBPC35005	GBPC3501	GBPC3502	GBPC3504	GBPC3506	GBPC3508	GBPC3510	UNIT
Maximum instantaneous forward voltage drop per diode	V <sub>FM</sub>	I <sub>FM</sub> =15A	1.1							V
Maximum DC reverse current at rated DC blocking voltage per diode	I <sub>RRM</sub>	V <sub>RM</sub> =V <sub>RRM</sub>	5							μA

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

PARAMETER	SYMBOL	GBPC35005	GBPC3501	GBPC3502	GBPC3504	GBPC3506	GBPC3508	GBPC3510	UNIT
Thermal Resistance Between junction and case, With heatsink	R <sub>θj-c</sub>	1.35							°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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