

Features

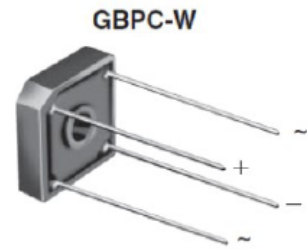
- Universal 3-way terminals : snap-on , wire wrap-around , or PCB mounting
- High surge current capability
- Low thermal resistance
- Solder dip 275 °C max. 7 s, per JESD 22-B106

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-T/GBPC-W
Molding compound meets UL 94 V-0 flammability rating, RoHS-compliant
- Terminals Finish Material
 - ◆ Silver or Nickel for GBPC-W package
 - ◆ Nickel for GBPC-T package
- Solderable per J-STD-002 and JESD22-B102 for the wire type GBPC-W package


■ Maximum Ratings (Ta=25°C Unless otherwise specified)

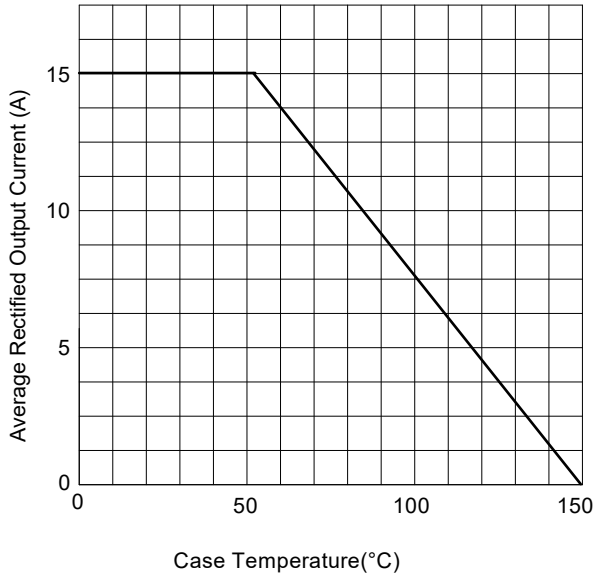
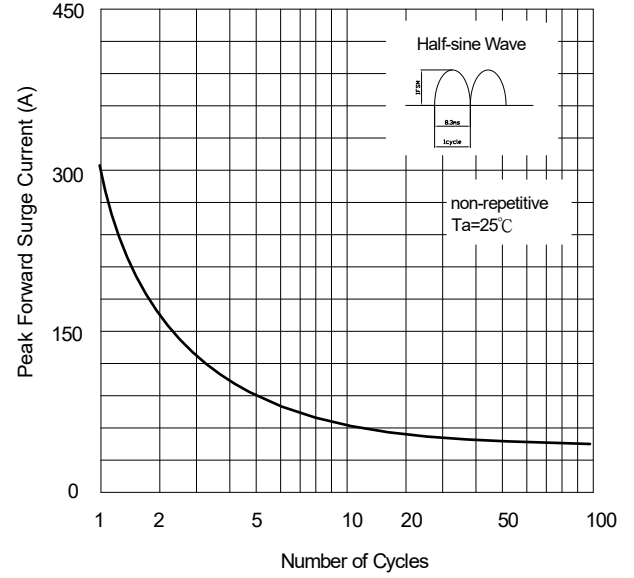
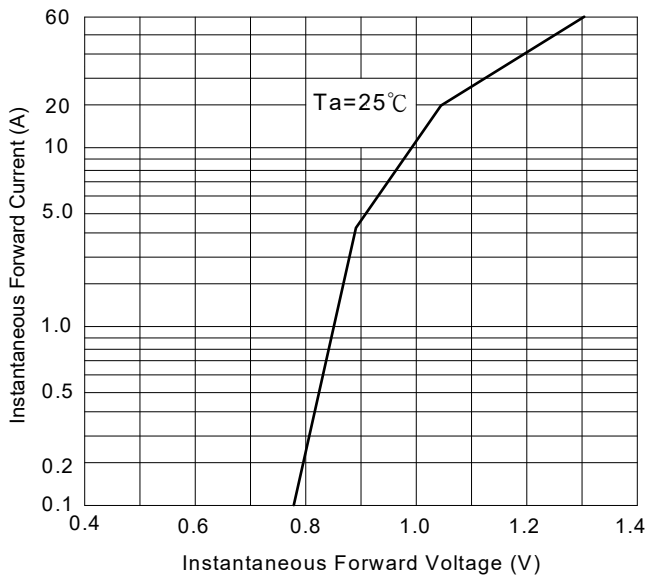
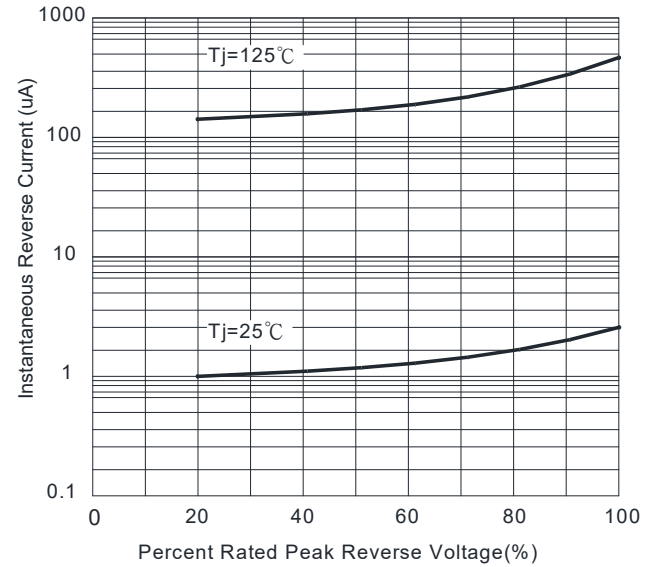
PARAMETER	SYMBOL	GBPC15005	GBPC1501	GBPC1502	GBPC1504	GBPC1506	GBPC1508	GBPC1510	UNIT
Device marking code		GBPC15005	GBPC1501	GBPC1502	GBPC1504	GBPC1506	GBPC1508	GBPC1510	
Repetitive Peak Reverse Voltage	VRRM	50	100	200	400	600	800	1000	V
Average Rectified Output Current @60Hz sine wave, R-load, With heatsink Tc=55°C	IO	15							A
Surge(Non-repetitive)Forward Current @60HZ Half-sine Wave, 1 cycle, Ta=25°C	IFSM	300							A
Current Squared Time @1ms≤t<8.3ms Tj=25°C, Rating of per diode	I²t	374							A²S
Storage Temperature	Tstg	-55 ~+150							°C
Junction Temperature	Tj	-55 ~+150							°C
Dielectric Strength, Terminals to case · AC 1 minute	Vdis	2.5							KV
Mounting Torque	TOR	10							kg·cm

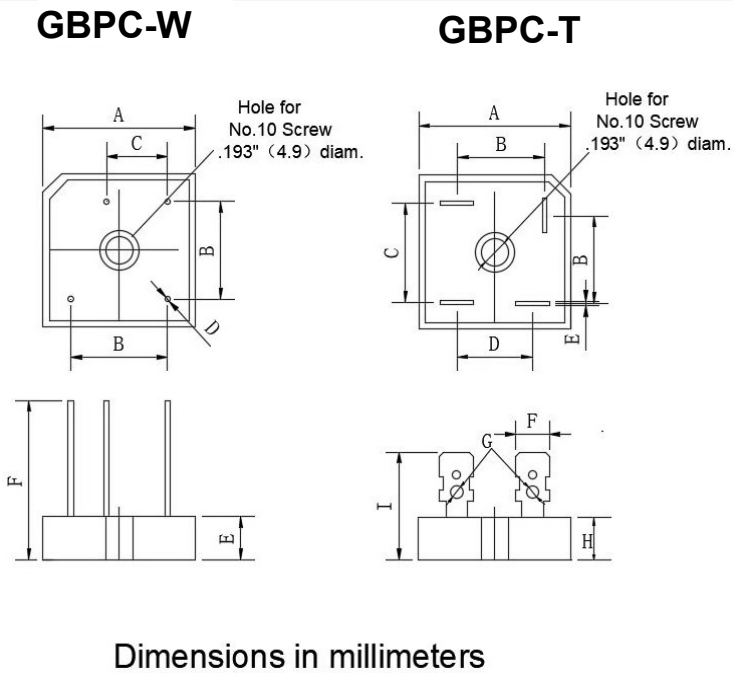
■ Electrical Characteristics (Ta=25°C Unless otherwise specified)

PARAMETER	SYMBOL	TEST CONDITIONS	GBPC15005	GBPC1501	GBPC1502	GBPC1504	GBPC1506	GBPC1508	GBPC1510	UNIT
Maximum instantaneous forward voltage drop per diode	VFM	IFM=7.5A	1.1							V
Maximum DC reverse current at rated DC blocking voltage per diode	IRRM	V _{RM} =VRRM	10							µA

■ Thermal Characteristics (Ta=25°C Unless otherwise specified)

PARAMETER	SYMBOL	GBPC15005	GBPC1501	GBPC1502	GBPC1504	GBPC1506	GBPC1508	GBPC1510	UNIT
Thermal Resistance Between junction and case, With heatsink	RθJ-c	1.82							°C/W

■ Characteristics (Typical)
FIG1: Io-Tc 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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