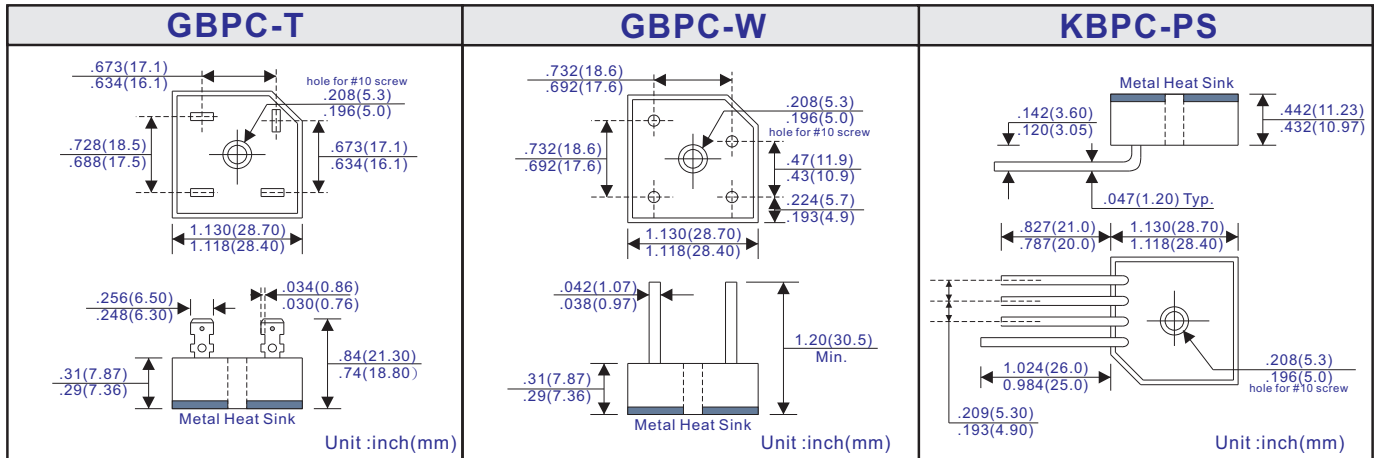




**GBPC10, 15, 25
 35, 40, & 50 Series**

**10.0A ~ 50.0A Glass Passivated
 Single-Phase Bridge Rectifiers - 50V-1000V**



FEATURES

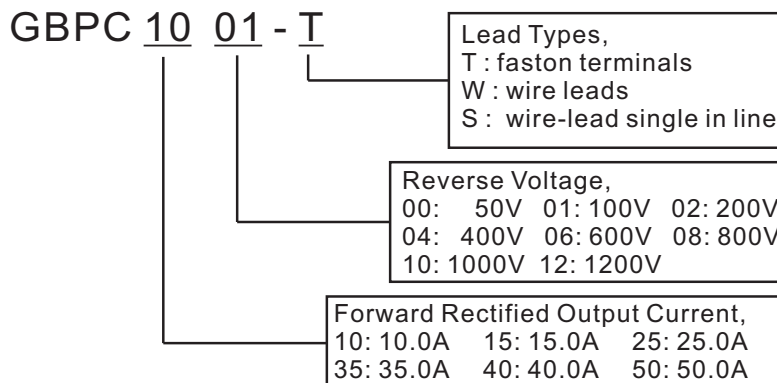
- Low forward drop voltage & reverse leakage current
- Integrally molded heatsink provides very low thermal resistance for maximum heat dissipation
- High forward surge current capabilities
- Glass passivated chip junction
- Universal 3-way terminals for selection, faston terminals, wire leads and wire-lead single in line
- Optional standard & low profile cases
- Pb-free parts for green partner

MECHANICAL DATA

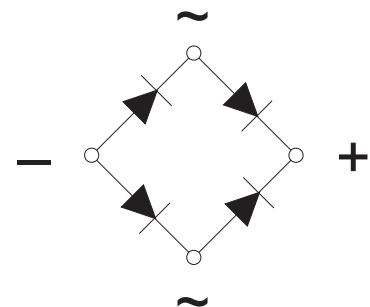
- Case: Plastic square body GBPC-P with heatsink
- Epoxy: UL94 -V0 rated flame retardant
- Terminals: Solderable per MIL-STD- 750 Method 2026
- Polarity: As marked on the side body
- Mounting Position: Hole thru for #10 screw (Note A)
- Mounting Torque: 20 in-lb (23 cm-kg). max.
- Weight: GBPC-W, 0.53 ounce, 15 grams,
 GBPC-T, 0.63 ounce, 18 grams,
 KBPC-PS: 0.63 ounce, 18 grams,

Note A. Bolt down heat-sink with silicone thermal compound between bridge and mounting surface for maximum heat transfer efficiency with #10 screw

ORDER INFORMATION



CIRCUIT DIAGRAM





MAXIMUM RATING AND ELECTRICAL CHARACTERISTICS									
Ratings at 25°C ambient temperature unless otherwise specified									
GBPCXX, XX=10, 15, 25, 35, 40 or 50	Symbols	GBPC xx00	GBPC xx01	GBPC xx02	GBPC xx04	GBPC xx06	GBPC xx08	GBPC xx10	Units
Maximum Recurrent Peak Reverse Voltage	VRRM	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage	VRMS	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	VDC	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified Output Current (See Fig. 1)	GBPC10 GBPC15 GBPC25 GBPC35 GBPC40 GBPC50 I(AV)	10.0 15.0 25.0 35.0 40.0 50.0						Amps	
Peak Forward Surge Current 8.3mS single half sine-wave superimposed on rated load (JEDEC Method)	GBPC10 GBPC15 GBPC25 GBPC35 GBPC40 GBPC50 IFSM	200 300 300 400 400 450						Amps	
Rating (Non-Repetitive, for t greater than 1ms and less than 8.3ms) for fusing	GBPC10 GBPC15 GBPC25 GBPC35 GBPC40 GBPC50 I ² t	160 375 375 660 660 800						A ² sec	
Maximum Instantaneous Forwarded Voltage Drop Per Leg at	GBPC10 IF= 5.0A GBPC15 IF= 7.5A GBPC25 IF=12.5A GBPC35 IF=17.5A GBPC40 IF=20.0A GBPC50 IF=25.0A VF	1.1						Volts	
Maximum DC Reverse Current at Rated DC Blocking Voltage	TA= 25°C TA=125°C IR	5.0 500.0						µA	
RMS Isolation Voltage from Case to Leads	VISO	2500						Volts	
Typical Junction Capacitance (Note 1)	GBPC10 GBPC15-25 GBPC35-50 CJ	200.0 300.0 400.0						pF	
Typical Thermal Resistance Per Leg (Note 2)	GBPC10 GBPC15-25 GBPC35-40 GBPC50 RθJC	1.9 1.9 1.4 1.0						°C/W	
Operating Junction Temperature Range	TJ	-55 ~ +150						°C	
Storage Temperature Range	TSTG	-65 ~ +150						°C	

Note 1. Measured at 1.0MHz and applied reverse voltage of 4.0 Volts
 2. Thermal resistance from junction to case per leg with unit mounted on 220x220x50mm Al plate heatsink.
 3. Special design for reverse voltage over 1000V per customer's requirement.

