



GBPC15 , 25 AND 35 SERIES

SINTERED GLASS PASSIVATED BRIDGE RECTIFIER

Reverse Voltage - 50 to 1000 Volts

Forward Current - 15~35 Amperes

GBPC-W
Wire leads

GBPC
Standard



GBPC-W
Wire leads



GBPC
Standard

FEATURES

- * Internal Constructure with GPRC (Glass Passivated Rectifier Chip) inside
- * Plastic Material has Underwriters Laboratory Flammability Classification 94V-0
- * Integrally mold heatsink provides very low thermal resistance formaximum heat dissipation
- * High forward surge current capability
- * Universal 3-way terminals ; snap-on, wire wrap-around, or P.C.B. mounting
- * Typical IR less than 0.3uA
- * High temperature soldering guaranteed :
260°C/10 seconds at 5 lbs. (2.3kg) tension

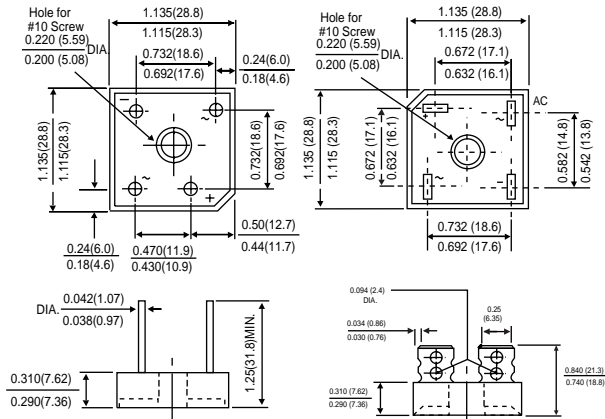
MECHANICAL DATA

Case : Molded Plastic with heatsink integrally mounted in the bridge encapsulation

Terminals : Either plated 0.25" (6.35mm). Faston lugs or plated copper leads 0.040"(1.02mm)diameter. Suffix letter "W" added to indicate leads (e.g. GBPC15005W)

Polarity : As marked on Body

Mounting Torque : 20 in. -lb. max. **Weight :** 15 grams (approx)



*Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified.	SYMBOLS	GBPC 15, 25 AND 35							UNITS
		005(W)	01(W)	02(W)	04(W)	06(W)	08(W)	10(W)	
Maximum repetitive 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 forwardrectified current (SEE FIG.1)	GBPC15 GBPC25 GBPC35	15 25 35							Amps
Peak forward surge current single half sine-wave superimposed on rated load (JEDEC Method)	GBPC15 GBPC25 GBPC35	300 300 400							Amps
Rating (non-repetitive for greater than 1ms and less than 8.3ms) for fusing	GBPC15 GBPC25 GBPC35	375 375 660							A ² s
Maximum instantaneous forward voltage drop per leg at	GBPC15 IF=7.5A GBPC25 IF=12.5A GBPC35 IF=17.5A	1.1							Volts
Maximum DC reverse current at rated DC blocking voltage	@TA=25°C @TA=125°C	5.0 500							uA
RMA isolation voltage from case to leads	GBPC15~25 GBPC35	2500							Volts
Typical Junction Capacitance per leg (NOTE 1)	CJ	300							pF
Typical thermal resistance per leg (NOTE 2)	RθJC	1.9 1.4							°C / W
Operating junctionStorage temperature range	TJ,TSTG	-55 to +175							°C

NOTES : (1) Measured at 1.0MHz and applied reverse voltage of 4.0V DC.

(2) Thermal resistance from junction to case per leg

(3) Bolt down on heat-sink with silicone thermal compound between bridge and mounting surface for maximum heat transfer efficiency with #10 screw

RATINGS AND CHARACTERISTIC CURVES GBPC15, 25 AND 35

FIG.1 - FORWARD CURRENT DERATING CURVE

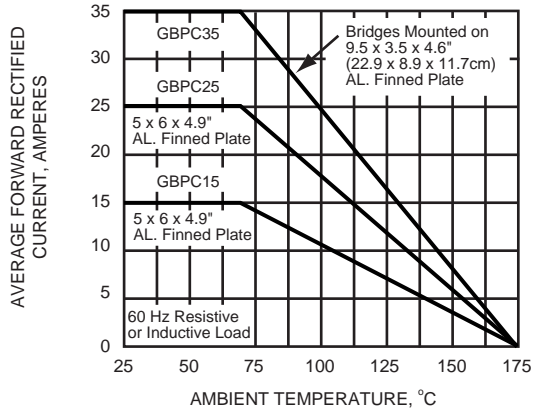


FIG.2 - MAXIMUM OUTPUT RECTIFIED CURRENT

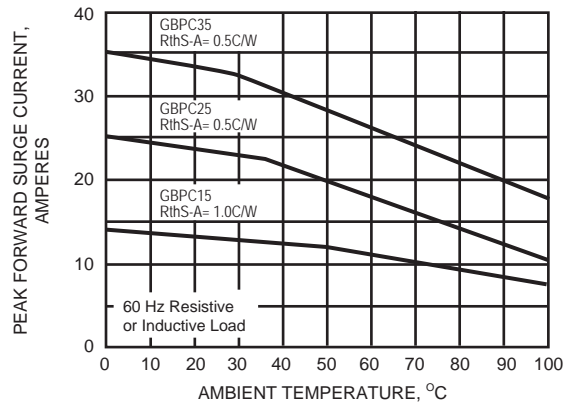


FIG.3 - MAXIMUM FORWARD DISSIPATION

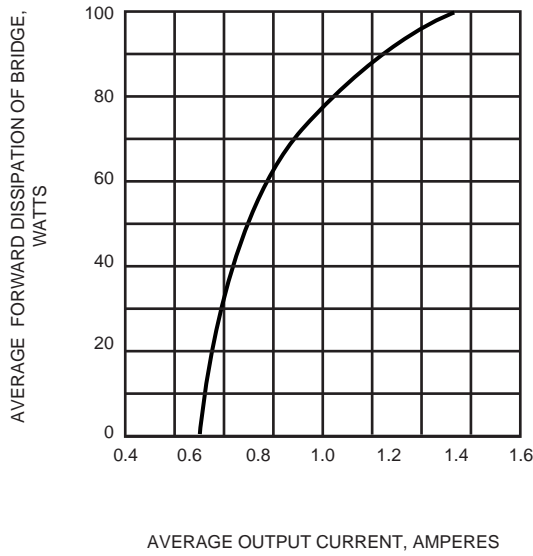


FIG.4 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG

