

FEATURES:

- Integrally molded heat sink provide low thermal resistance for max. heat dissipation
- High surge current capability
- Universal 3-way terminals : snap on, wire-around, or P.C. board mounting
- High temperature soldering guaranteed : 260° C/10 seconds at 5lbs. (2.3kg)tension
- AI plate plastic case

MECHANICAL DATA

Case : Molded plastic with heat-sink integrally mounted in the bridge encapsulation

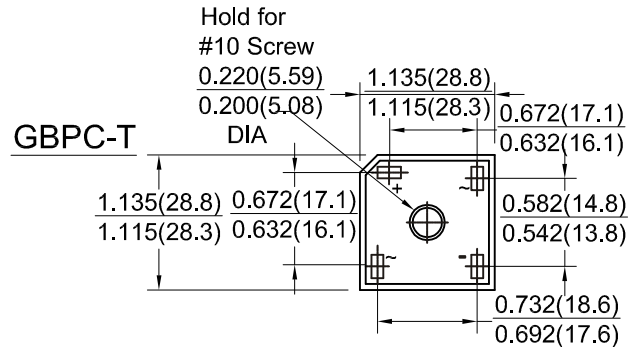
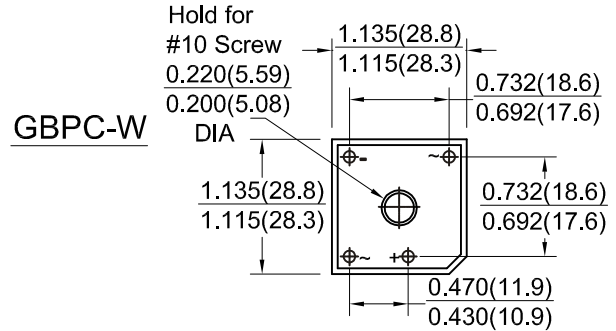
Terminals : Either nickel plated 0.25". Faston lugs or copper leads 0.040" diameter
sufficient letter "W" added to indicate leads

Polarity : Polarity symbols marked on body

Mounting Position : Bolt down on heat-sink with silicone thermal compound between bridge and mounting surface

Weight : 15 grams or 0.53 ounce

Mounting Torque : 20 in.-lb. max



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25° C ambient temp. unless otherwise specified.

Single phase, half sine wave, 60 Hz, resistive or inductive load.

For capacitive load, derate current by 20 %.

Characteristic	Symbol	GBPC								Units
		35005 GT/W	3501 GT/W	3502 GT/W	3504 GT/W	3506 GT/W	3508 GT/W	3510 GT/W		
	Marking	GBPC 35005G	GBPC 3501G	GBPC 3502G	GBPC 3504G	GBPC 3506G	GBPC 3508G	GBPC 3510G		
Maximum recurrent peak reverse voltage	V _{RRM}	50	100	200	400	600	800	1000	Volts	
Maximum RMS voltage	V _{RMS}	35	70	140	280	420	560	700	Volts	
Maximum DC blocking voltage	V _{DC}	50	100	200	400	600	800	1000	Volts	
Maximum average forward rectified current at TC=50 ° C	I _O	35.0							Amps	
Peak forward surge current, single sine-wave on rated load(JEDEC Method)	I _{FSM}	400.0							Amps	
Rating for fusing(1ms<tm<8.3ms)	I ² t	660.0							A ² sec	
Maximum instantaneous forward voltage drop per leg at 17.50 A	V _F	1.1							Volts	
Maximum DC reverse current at rated DC blocking voltage per leg	I _R	5.0 500							μ A	
RMS isolated voltage from case to leads	V _{ISO}	2500							Volts	
Typical junction capacitance	C _j	300							pF	
Typical thermal resistance	R _{th-JC}	1.4							° C/W	
Operating junction and storage temperature range	T _j ,T _{stg}	-55 to +150							° C	

Notes : 1. Measured 1MHz and applied reverse voltage of 4.0V DC

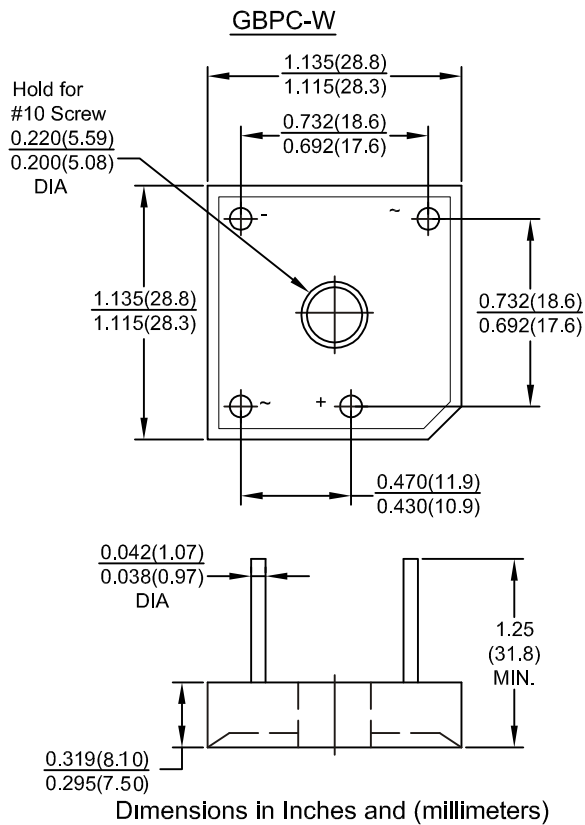
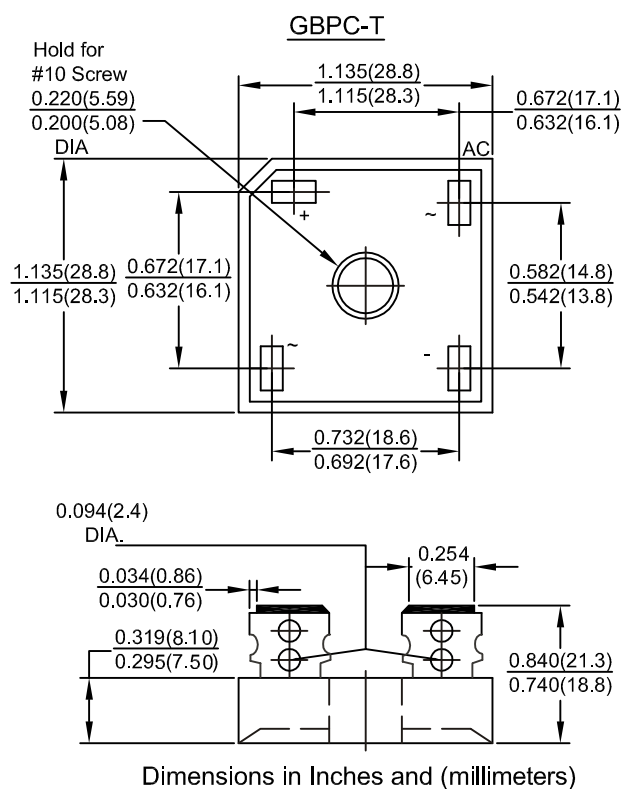


FIG.1-MAXIMUM OUTPUT RECTIFIED CURRENT

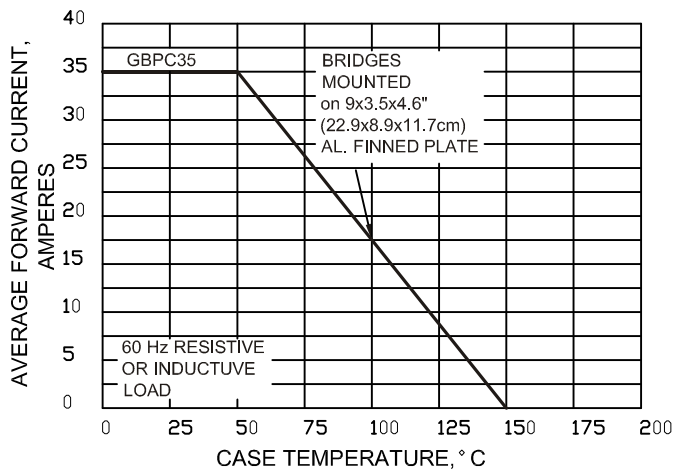


FIG.2-MAXIMUM OUTPUT RECTIFIED CURRENT

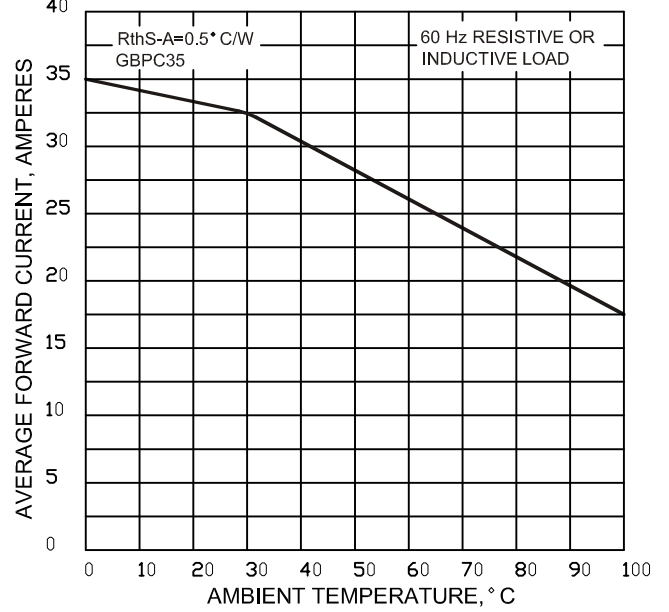


FIG.3-MAXIMUM POWER DISSIPATION

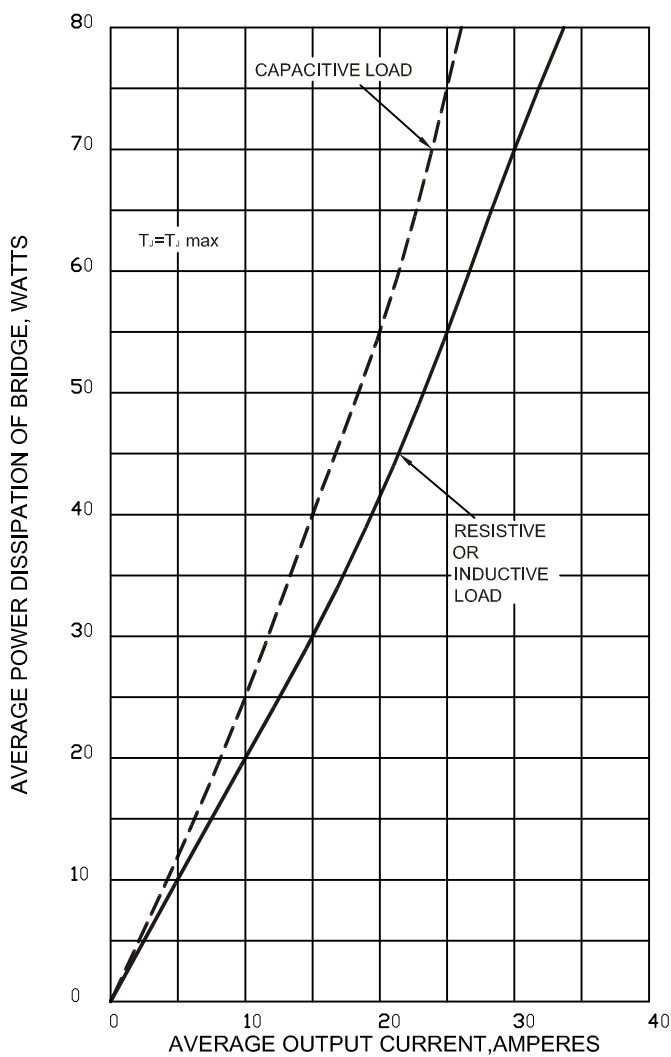


FIG.4-MAXIMUM NON-REPEITIVE PEAK FORWARD

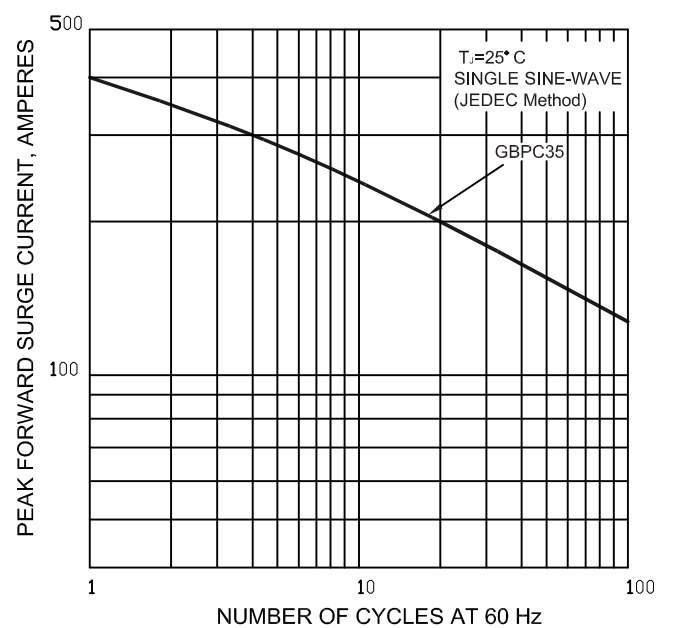


FIG.5-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER LEG

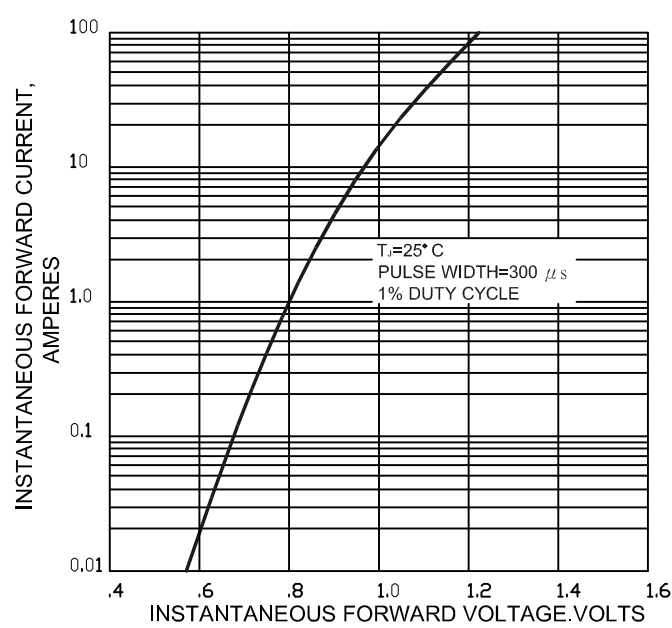


FIG.6-TYPICAL REVERSE CHARACTERISTICS

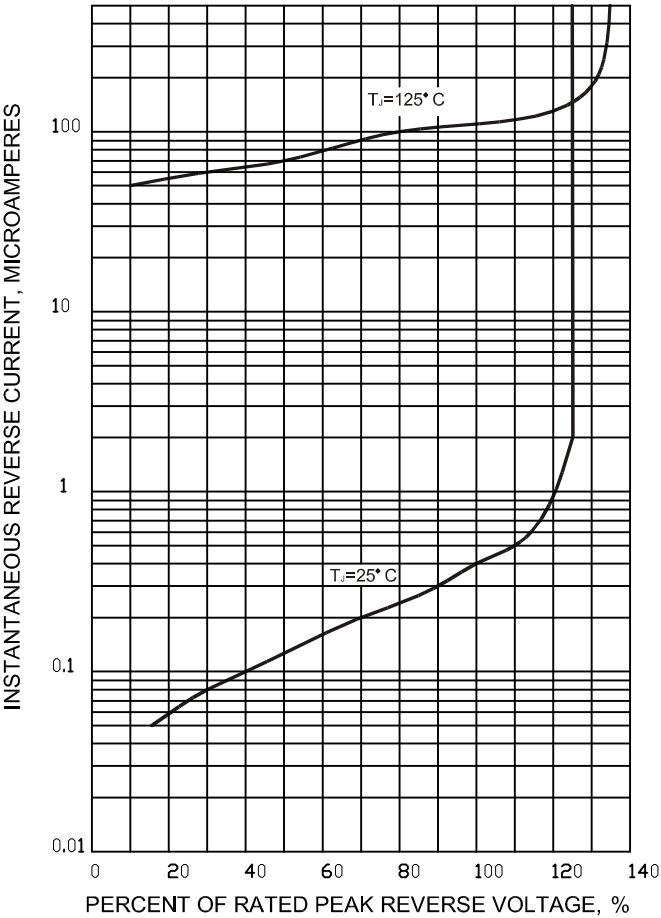


FIG.7-TYPICAL JUNCTION CAPACITANCE PER LEG

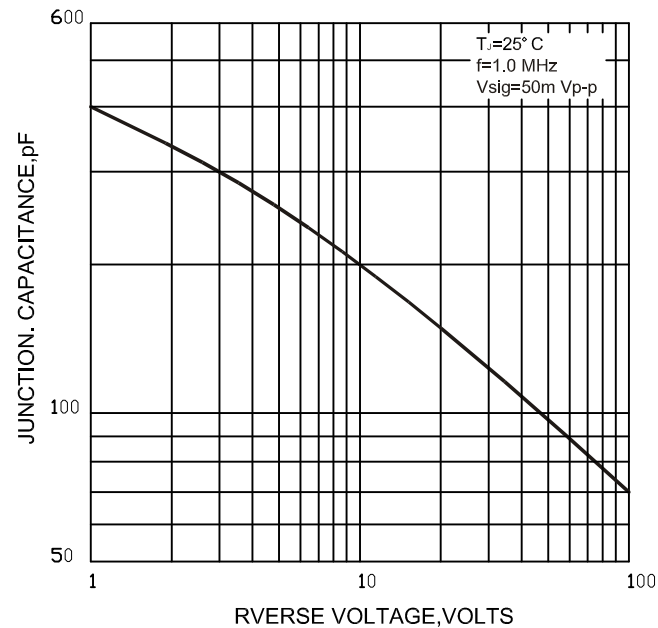


FIG.8-TYPICAL TRANSIENT THERMAL IMPEDANCE

