



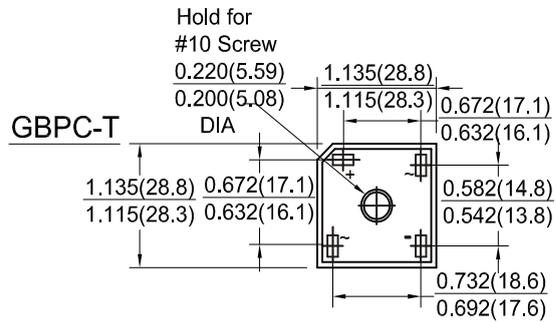
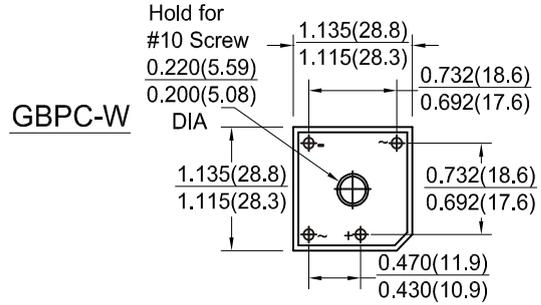
**SINGLE PHASE GLASS PASSIVATED BRIDGE RECTIFIERS**

**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**

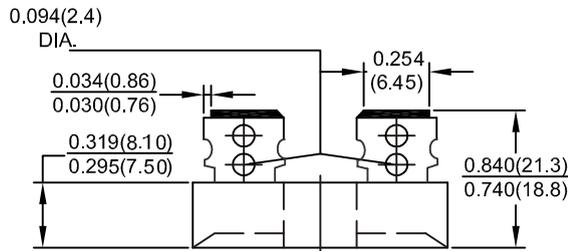
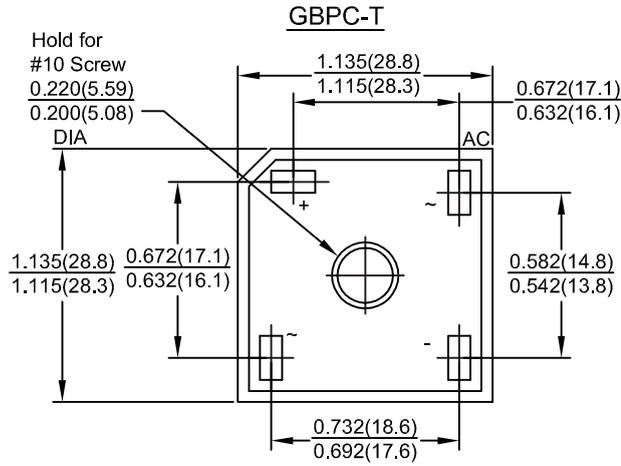
Rating at 25° C ambient temp. unless otherwise specified.  
 Single phase, half sine wave, 60 Hz, resistive or inductive load.  
 For capacitive load, derate current by 20 %.

Characteristic	Symbol Marking	GBPC									Units
		25005 T/W GBPC 25005	2501 T/W GBPC 2501	2502 T/W GBPC 2502	2504 T/W GBPC 2504	2506 T/W GBPC 2506	2508 T/W GBPC 2508	2510 T/W GBPC 2510			
Maximum recurrent peak reverse voltage	V <sub>RRM</sub>	50	100	200	400	600	800	1000			Volts
Maximum RMS voltage	V <sub>RMS</sub>	35	70	140	280	420	560	700			Volts
Maximum DC blocking voltage	V <sub>DC</sub>	50	100	200	400	600	800	1000			Volts
Maximum average forward rectified current at TC=50 ° C	I <sub>O</sub>	25.0									Amps
Peak forward surge current, single sine-wave on rated load(JEDEC Method)	I <sub>FSM</sub>	300.0									Amps
Rating for fusing(1ms<tm<8.3ms)	I <sup>2</sup> t	375.0									A <sup>2</sup> sec
Maximum instantaneous forward voltage drop per leg at 12.50 A	V <sub>F</sub>	1.1									Volts
Maximum DC reverse current at rated DC blocking voltage per leg Ta=25° C Ta=125° C	I <sub>R</sub>	5.0 500									μ A
RMS isolated voltage from case to leads	V <sub>ISO</sub>	2500									Volts
Typical junction capacitance	C <sub>j</sub>	300									pF
Typical thermal resistance	R <sub>th-JC</sub>	1.9									° C/W
Operating junction and storage temperature range	T <sub>j</sub> , T <sub>stg</sub>	-55 to +150									° C

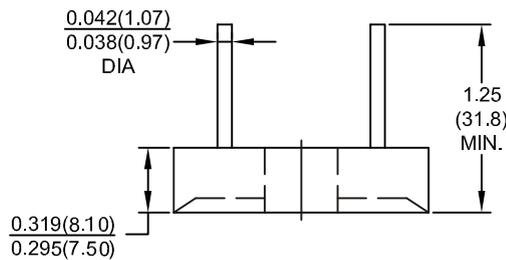
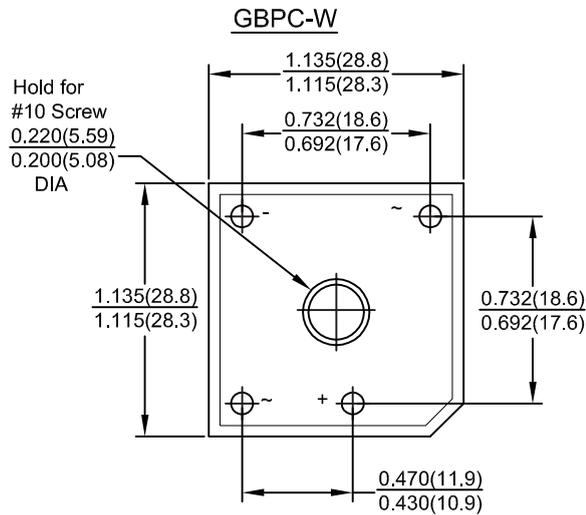
Notes : 1. Measured 1MHz and applied reverse voltage of 4.0V DC



RATINGS AND CHARACTERISTIC CURVES



Dimensions in Inches and (millimeters)



Dimensions in Inches and (millimeters)



**RATINGS AND CHARACTERISTIC CURVES**

FIG.1-MAXIMUM OUTPUT RECTIFIED CURRENT

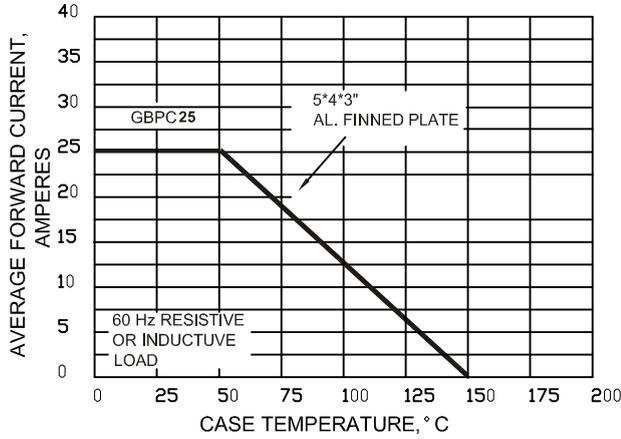


FIG.2-MAXIMUM OUTPUT RECTIFIED CURRENT

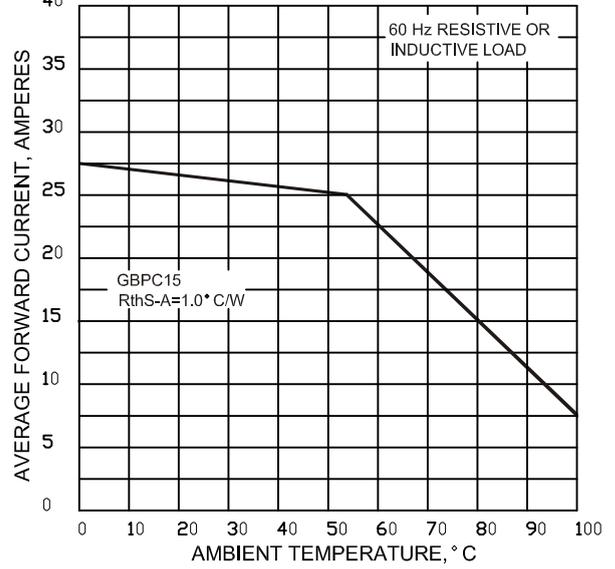


FIG.3-MAXIMUM POWER DISSIPATION

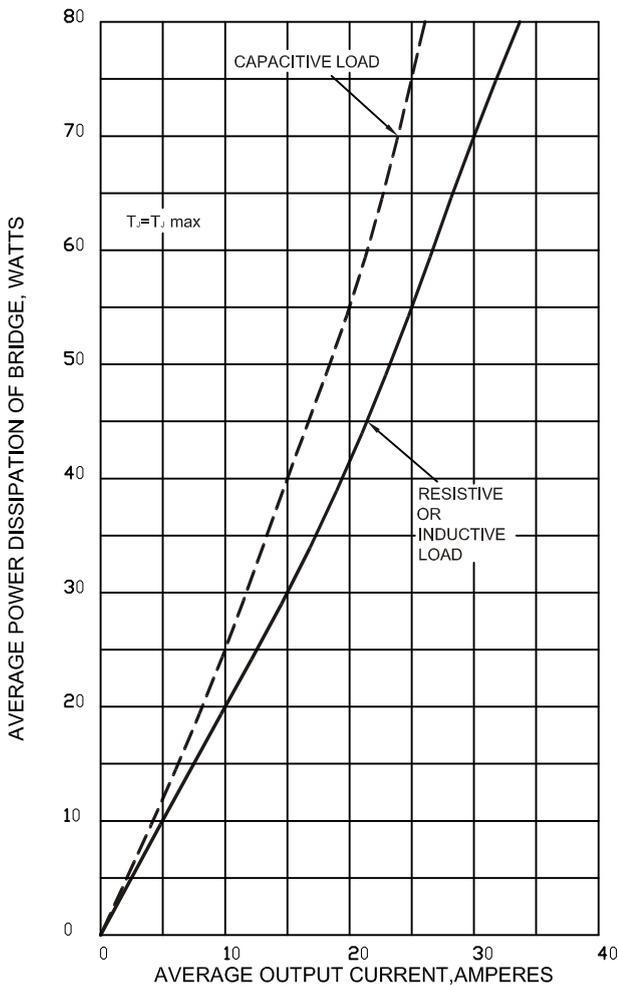
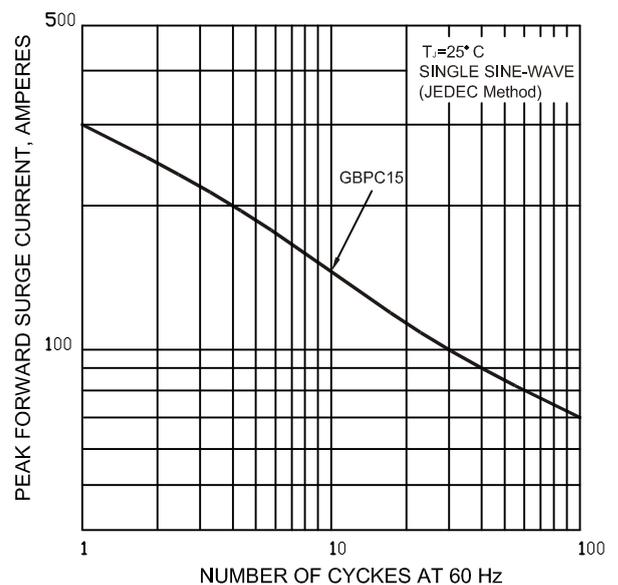


FIG.4-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG





RATING AND CHARACTERISTIC CURVES

FIG.5-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER LEG

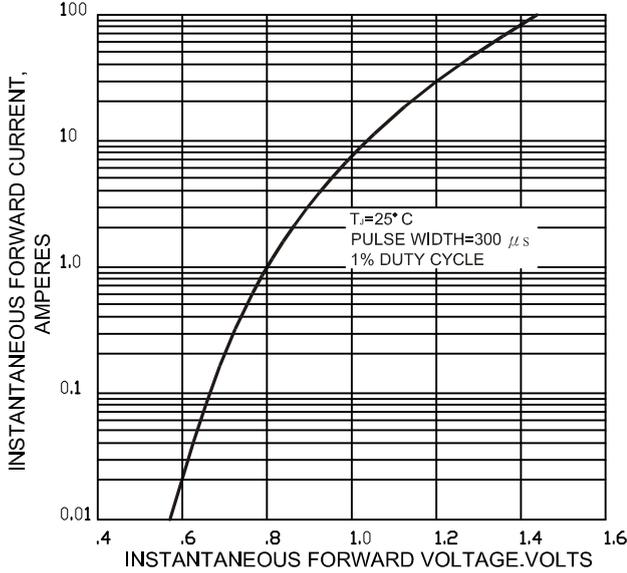


FIG.6-TYPICAL REVERSE LEAKAGE CHARACTERISTICS PER LEG

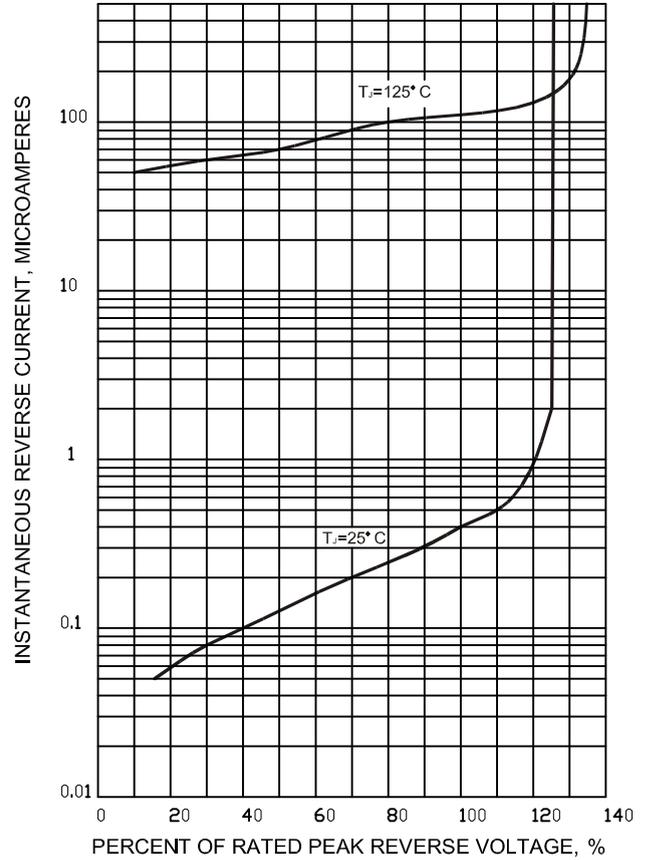


FIG.7-TYPICAL JUNCTION CAPACITANCE PER LEG

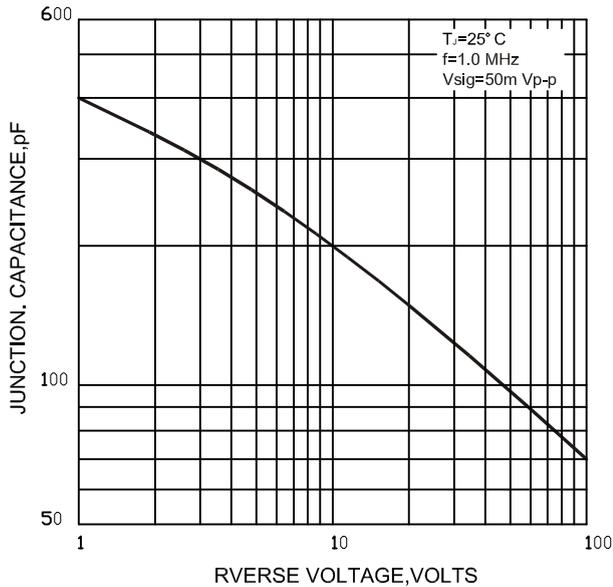
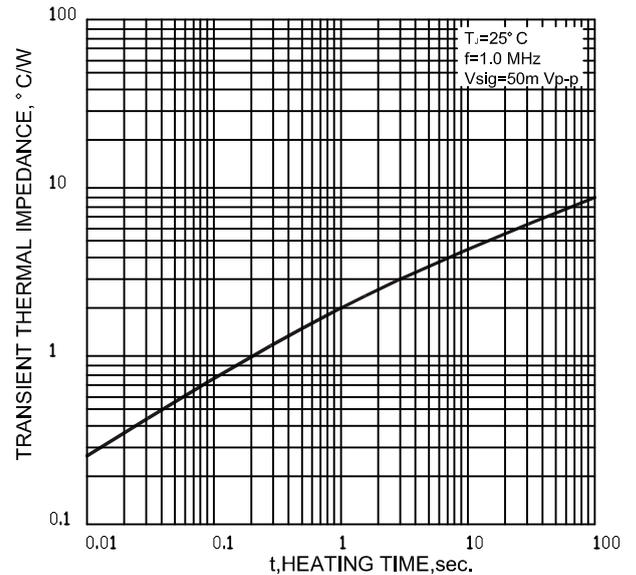


FIG.8-TYPICAL TRANSIENT THERMAL IMPEDANCE PER LEG





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