

CURRENT 15.0 Ampere
 VOLTAGE RANG 50 to 1000 Volts

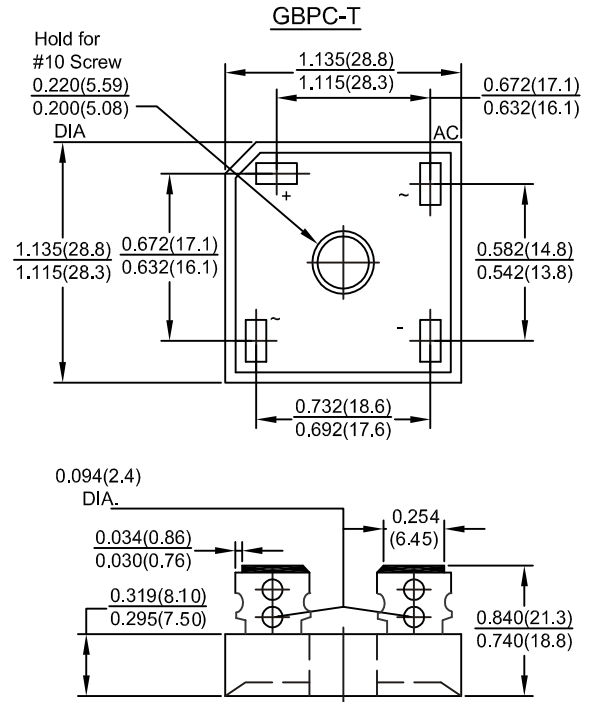
GBPC1501 THRU GBPC1510

Features

- This series is SGS listed under the Recognized Component Index, file number SZXEC1902259902
- Integrally molded heat sink provide low thermal resistance for max. heat dissipation
- High surge current capability
- Void-free junction soldering by using vacuum soldering
- 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
- All 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
		15005	1501	1502	1504	1506	1508	1510		
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=55° C	I _O	15.0							Amps	
Peak forward surge current, single sine-wave on rated load (JEDEC Method)	I _{FSM}	300.0							Amps	
Rating for fusing (1ms < t _m < 8.3ms)	I ² t	375.0							A ² sec	
Maximum instantaneous forward voltage drop per leg at 7.50 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}	1.9							°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

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Rating and Characteristic Curves ($T_A=25^{\circ}\text{C}$ Unless otherwise noted)

FIG.1-MAXIMUM OUTPUT RECTIFIED CURRENT

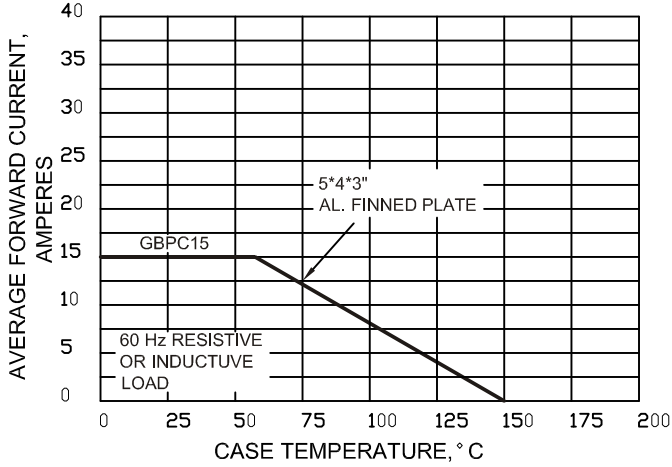


FIG.2-MAXIMUM OUTPUT RECTIFIED CURRENT

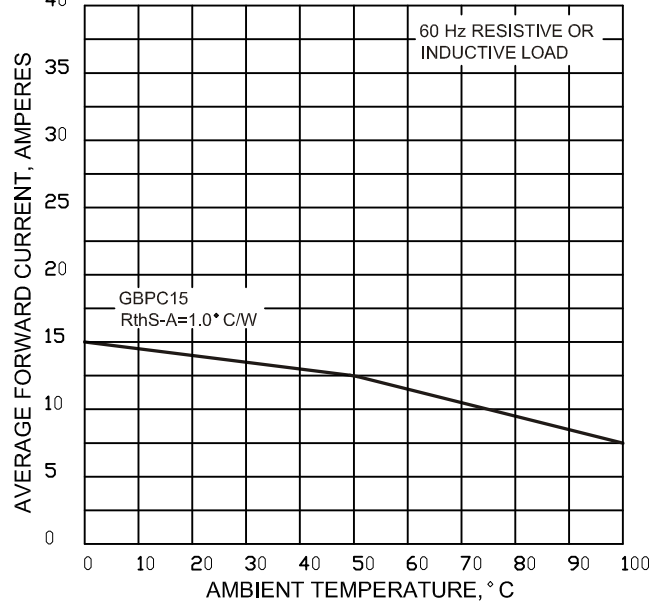


FIG.3-MAXIMUM POWER DISSIPATION

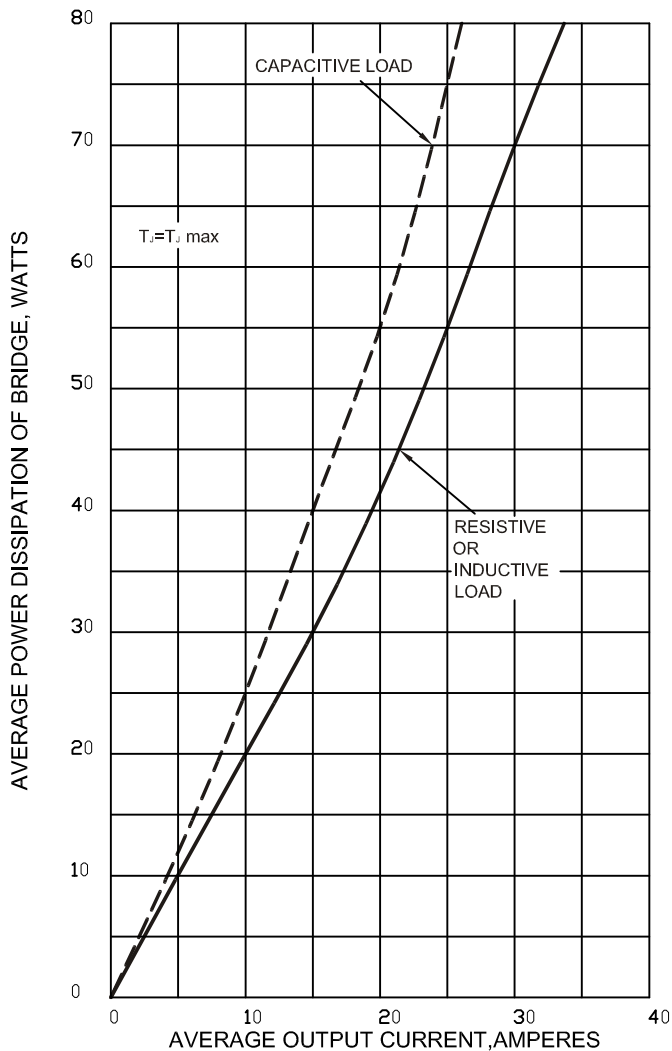
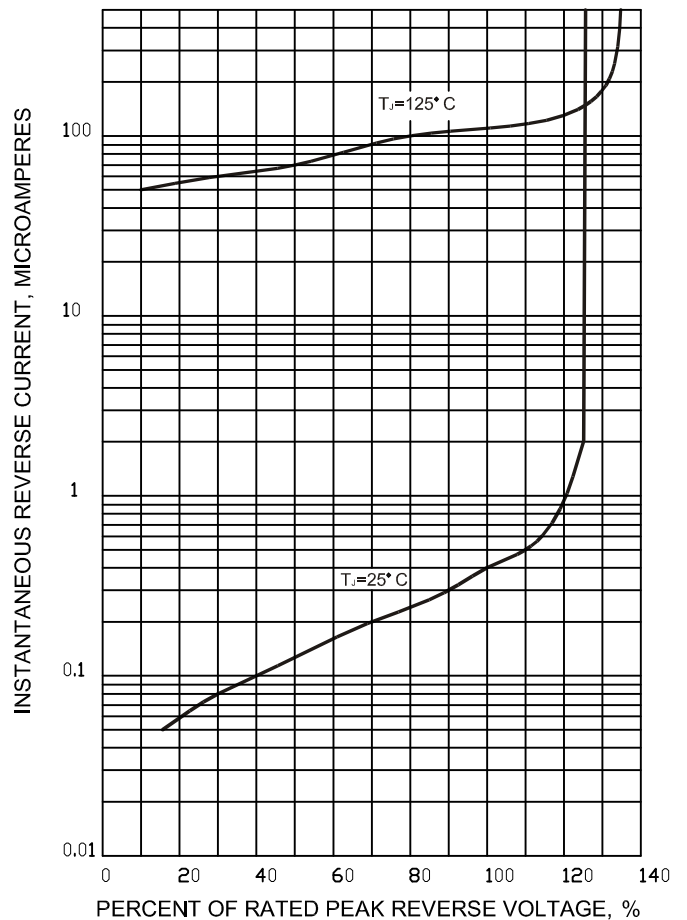


FIG.6-TYPICAL REVERSE LEAKAGE CHARACTERISTICS PER LEG



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

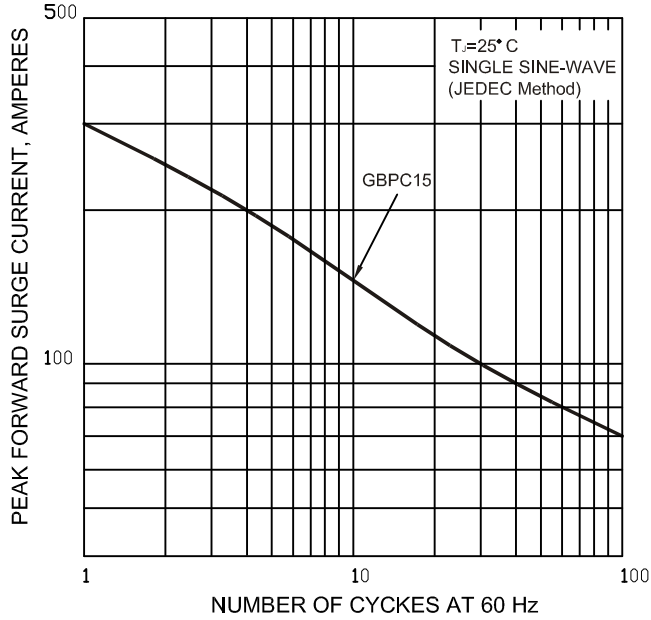


FIG.5-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER LEG

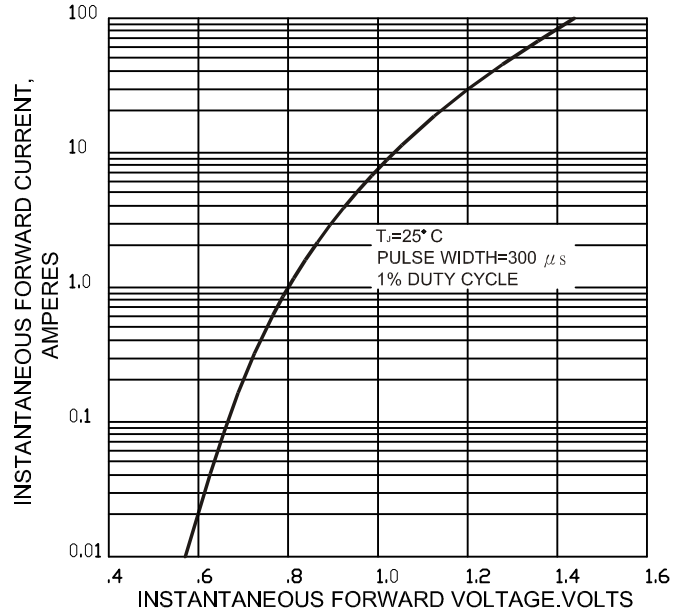


FIG.7-TYPICAL JUNCTION CAPACITANCE PER LEG

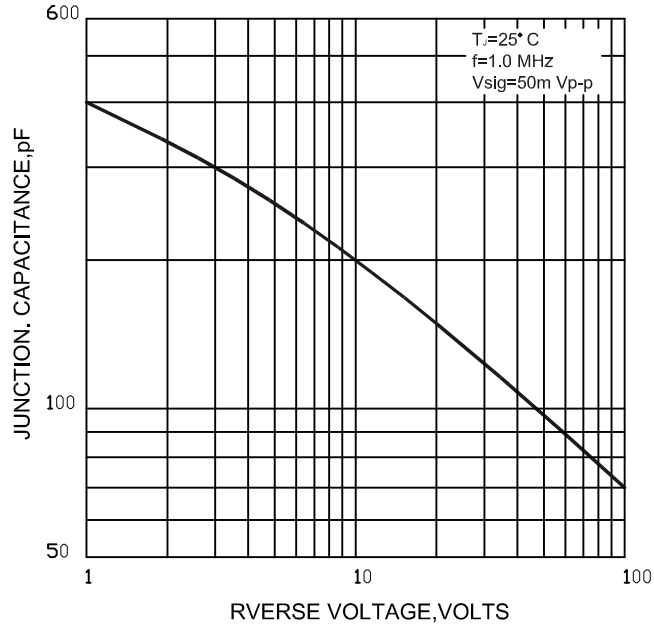


FIG.8-TYPICAL TRANSIENT THERMAL IMPEDANCE PER LEG

