GBPC15005 THRU GBPC1510

SINGLE-PHASE BRIDGE RECTIFIER GLASS PASSIVATED BRIDGE RECTIFIERS REVERSE VOLTAGE 50 to 1000 Volts FORWARD CURRENT 15 Ampere

FEATURES

- ◆Rating to 1000V PRV.
- ♦ High efficiency.
- ♦Glass passivated chip junction.
- ◆Electrically isolated metal case for maximum heat dissipation.
- ◆The plastic material has UL flammability classification 94V-0.
- ◆Electrically isolated base-2500 Volts

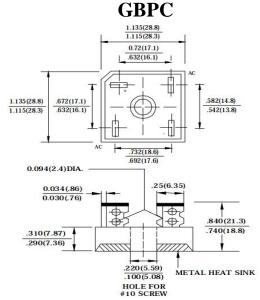
Mechanical Data

◆Case: Molded plastic with Heatsink internally mounted in the bridge encapsulation.

◆Polarity: As marked on Body.

♦ Mounting: Hole for # 10 screw.

◆Weight: 0.55 ounces, 15.6 grams (terminal).



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%

PARAMETER	SYMBOL	GBPC 15005	GBPC 1501	GBPC 1502	GBPC 1504	GBPC 1506	GBPC 1508	GBPC 1510	UNIT
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward(with heatsink Note 2) Rectified Current @ $T_C=110^{\circ}C$ (without heatsink)	I(AV)	15.0							A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	I _{FSM}	300							A
Maximum forward Voltage at 7.5A DC	$V_{\rm F}$	1.1							V
Maximum DC Reverse Current @ T_J =25°C at Rated DC Blocking voltage @ T_J =125°C	$I_{ m R}$	5.0 500							μΑ
I ² t Rating for fusing(t<8.3ms)	I^2t	374							A^2S
Typical Junction Capacitance per element(Note 1)	C_{J}	300							pF
Typical Thermal Resistance (Note 2)	RөJC	1.9							°C/W
Operating Temperature Range	T_{J}	-55 to +150							$^{\circ}$ C
Storage Temperature Range	Tstg	-55 to +150							°C

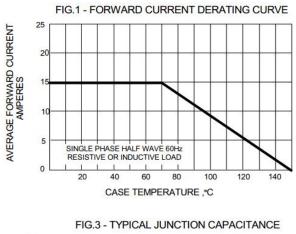
Note: 1.Measured at 1.0M Hz and applied reversed voltage of 4.0 VDC.

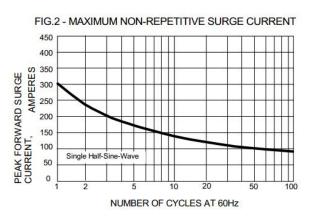
- 2. Measured at non-repetitive, for greater than 1ms and less than 8.3ms.
- 3. Device mounted on 300mm x 300mm x 1.6mm Cu Plate Heatsink.

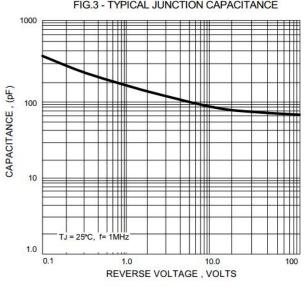
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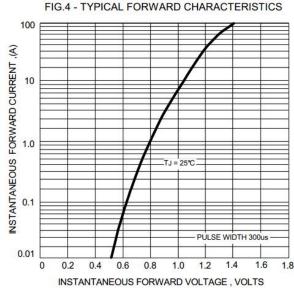
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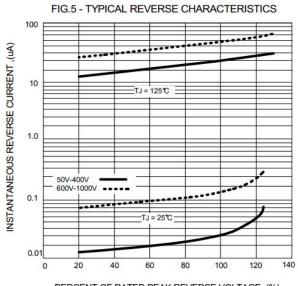
RATING AND CHARACTERISTIC CURVES GBPC15005 THRU GBPC1510











PERCENT OF RATED PEAK REVERSE VOLTAGE, (%)

Note: Specifications are subject to change without notice. For more detail and update, please visit our website.