GLASS PASSIVATED BRIDGE RECTIFIERS

REVERSE VOLTAGE 50 to 1000 Volts
FORWARD CURRENT 6 Amperes

FEATURES

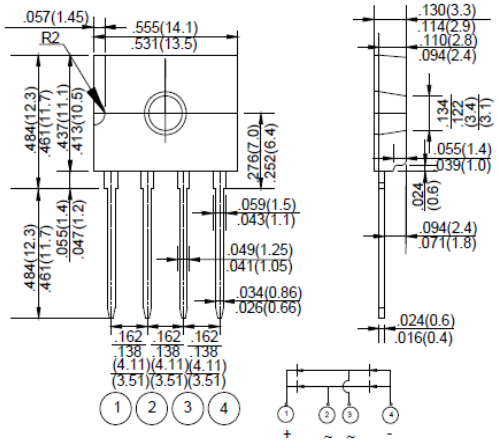
- Glass passivated chip junction
- High case dielectric strength
- High surge current capability

Ideal for printed circuit board

MECHANICAL DATA

- Polarity: As marked on Body
- Mounting position: Any

GBP



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS
Ratings at 25°C ambient temperature unless otherwise specified.
Single phase, half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%

Characteristics	Symbol	GBP 6005	GBP 601	GBP 602	GBP 604	GBP 606	GBP 608	GBP 610	Unit
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
RMS Reverse 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 Rectified Output Current @T_C=140°C(with heatsink)	$I_{(AV)}$	6							A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Super Imposed on Rated Load (JEDEC method)	I_{FSM}	150							A
Maximum Forward Voltage at 3.0A DC	V_F	1.0							V
Maximum DC Reverse Current @Ta=25°C at Rated DC Blocking Voltage @Ta=125°C	I_R	10 500							μA
I^2t Rating for Fusing (t<8.3ms)	I^2t	93							A^2s
Maximum Typical Thermal without heatsink with heatsink without heatsink	$R_{\theta JA}$ $R_{\theta JC}$ $R_{\theta JL}$	55 1.5 15							°C/W
Junction and StorageTemperature Range	T_J, T_{STG}	-55 to +150							°C

Rating and Characteristic Curves

FIG.1-DERATING CURVE OUTPUT RECTIFIED CURRENT

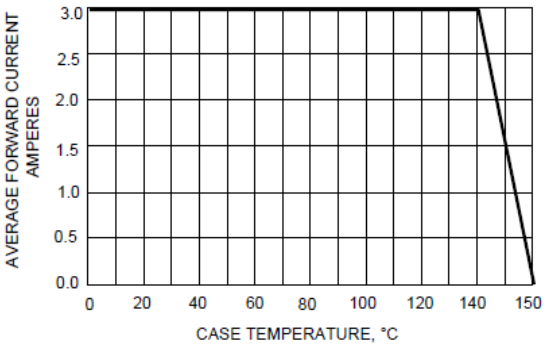


FIG.2-MAXIMUM NON-REPETITIVE SURGE CURRENT

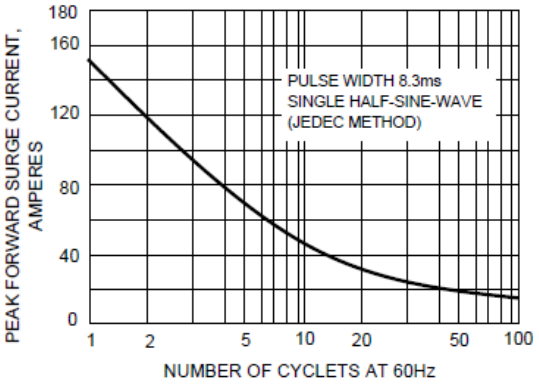


FIG.3-TYPICAL FORWARD CHARACTERISTICS

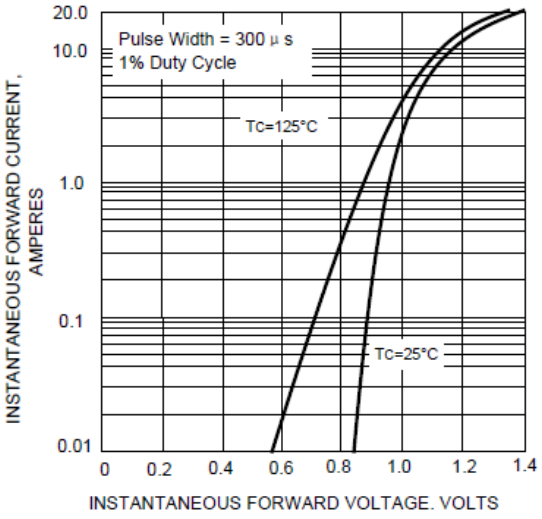


FIG.4-TYPICAL REVERSE CHARACTERISTICS