

GBPC50005~GBPC5010

BRIDGE RECTIFIERS

VOLTAGE 50 to 1000 Volt **CURRENT** 50 Ampere

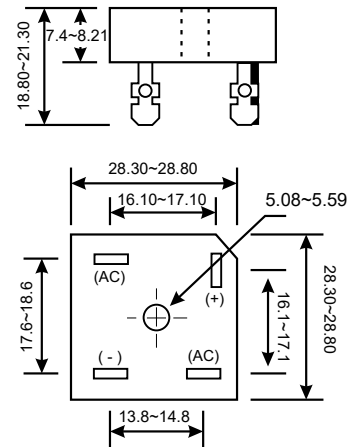
GBPC Unit:mm

FEATURES

- Glass passivated chip junction
- Low Power Loss
- Low Reverse Leakage Current
- High Efficiency
- Lead free in compliance with EU RoHS

MECHANICAL DATA

- Case Material: Molded Plastic.
- UL Flammability Classification Rating 94V-0



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

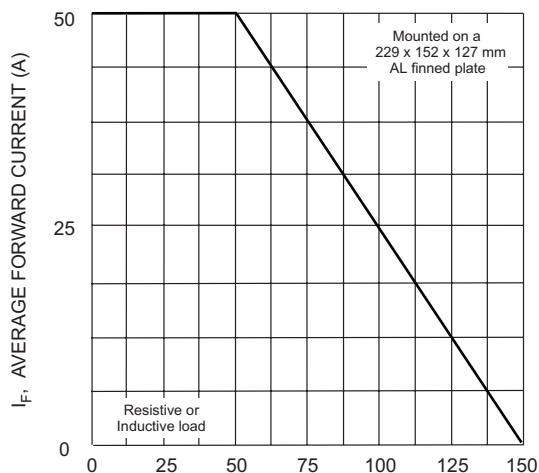
PARAMETER	SYMBOL	GBPC50005	GBPC5001	GBPC5002	GBPC5004	GBPC5006	GBPC5008	GBPC5010	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Current (see FIG.1)	$I_{F(AV)}$	50							A
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	500							A
Maximum Forward Voltage at 25 A	V_F	1.1							V
Maximum DC Reverse Current at Rated DC Blocking Voltage	I_R	5 500							μA
Thermal Resistance (Note1)	$R_{\theta JC}$	1.0							°C / W
I^2t Rating for fusing	I^2t	800							A ² S
Typical Junction Capacitance (Note2)	C_J	400							pF
Operating Junction Temperature Range	T_J	-55 to +150							°C
Storage Temperature Range	T_{STG}	-55 to +150							°C

NOTES:

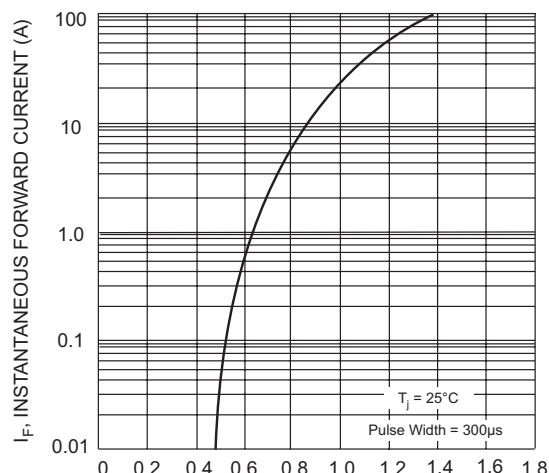
1. Thermal resistance junction to case mounted on heatsink.
2. Measured at 1.0MHz and applied reverse voltage of 4.0 volt

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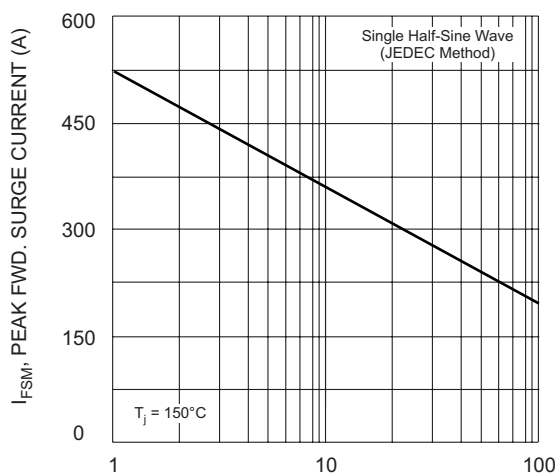
RATING AND CHARACTERISTIC CURVES



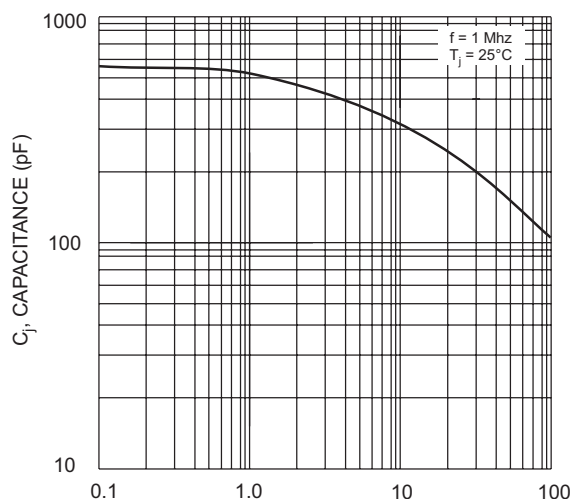
T_C , CASE TEMPERATURE (°C)
Fig. 1 Forward Current Derating Curve



V_F , INSTANTANEOUS FORWARD VOLTAGE (V)
Fig. 2 Typical Forward Characteristics (per element)



NUMBER OF CYCLES AT 60 Hz
Fig. 3 Max Non-Repetitive Surge Current



V_R , REVERSE VOLTAGE (V)
Fig. 4 Typical Junction Capacitance (per element)

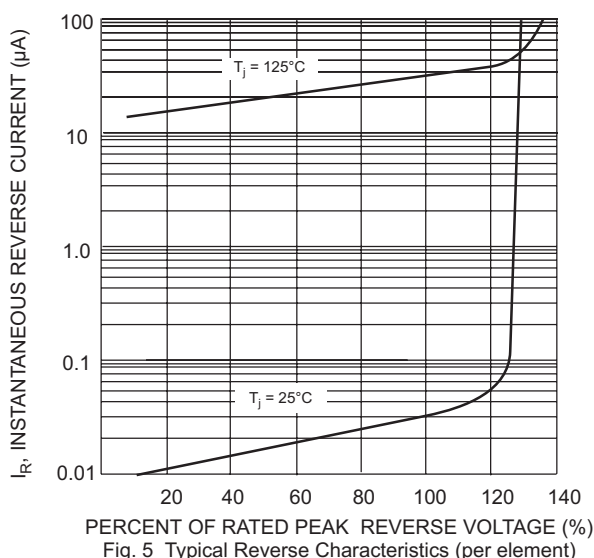


Fig. 5 Typical Reverse Characteristics (per element)

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ORDER INFORMATION

- Packing information

Part Number	Case	DELIVERY MODE	QUANTITY
GBPC50005~GBPC5010	GBPC	BULK	400/Ctn