GBPC10/15/25/35/50 Series

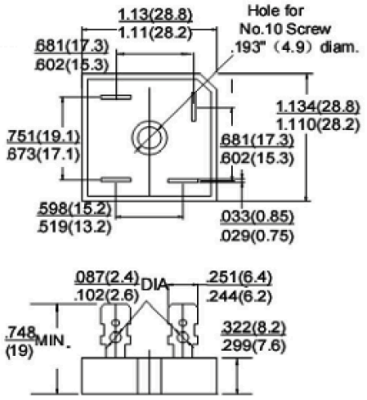
Glass Passivated Single-Phase Bridge Rectifiers

Voltage Range 50 to 1000 Volts Forward Current 10/15/25/35/50 Amperes

Features

- Surge overload rating - 200~400 Amperes peak
- Low forward voltage drop
- Mounting Position: Any
- Electrically isolaged base - 1800 Volts
- Solderable 0.25" FASTON terminals
- Materials used carries U/L recognition

GBPC



Dimensions in inches and (millimeters)

Maximum Ratings and Electrical Characteristics

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

Parameter		Symbols	GBPC 10005 / 15005 / 25005 / 35005 / 50005	GBPC 1001 / 1501 / 2501 / 3501 / 5001	GBPC 1002 / 1502 / 2502 / 3502 / 5002	GBPC 1004 / 1504 / 2504 / 3504 / 5004	GBPC 1006 / 1506 / 2506 / 3506 / 5006	GBPC 1008 / 1508 / 2508 / 3508 / 5008	GBPC 1010 / 1510 / 2510 / 3510 / 5010	Units
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 T_C=55°C	GBPC10 GBPC15 GBPC25 GBPC35 GBPC50	$I_{F(AV)}$	10.0 15.0 25.0 35.0 50.0							Amps
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	GBPC10 GBPC15 GBPC25 GBPC35 GBPC50	I_{FSM}	200.0 300.0 300.0 400.0 400.0							Amps
Max. instantaneous forward voltage drop per element at	GBPC10 I_F=5.0A GBPC15 I_F=7.5A GBPC25 I_F=12.5A GBPC35 I_F=17.5A GBPC50 I_F=25.0A	V_F	1.2							Volts
Maximum DC reverse current at rated DC blocking voltage per element	T_A=25°C T_A=125°C	I_R	10.0 500							uA
Operating temperature range		T_J	-55 to +150							°C
Storage temperature range		T_{STG}	-55 to +150							°C

RATINGS AND CHARACTERISTIC CURVES

(T_A = 25°C unless otherwise noted)

FIG. 1 - MAXIMUM FORWARD SURGE CURRENT

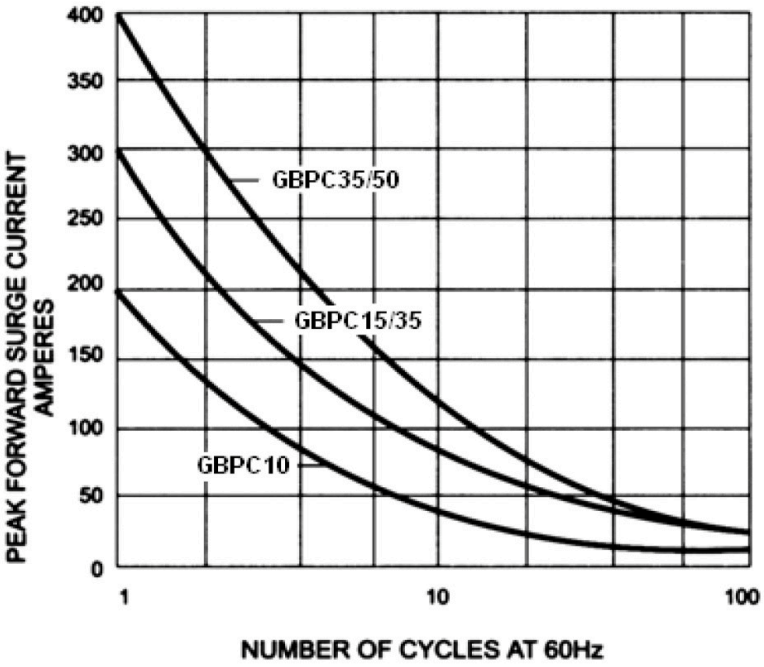


FIG. 2 - DERATING CURVE OUTPUT RECTIFIED CURRENT

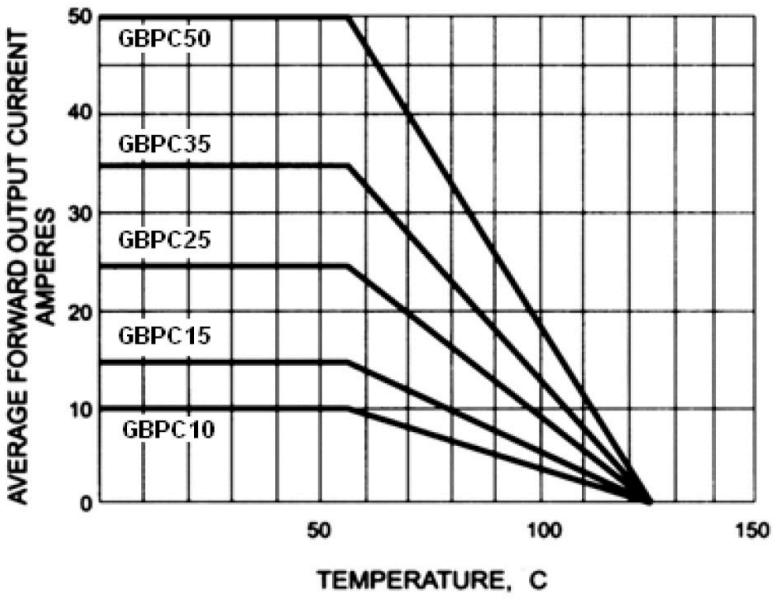


FIG. 3 - TYPICAL FORWARD CHARACTERISTICS

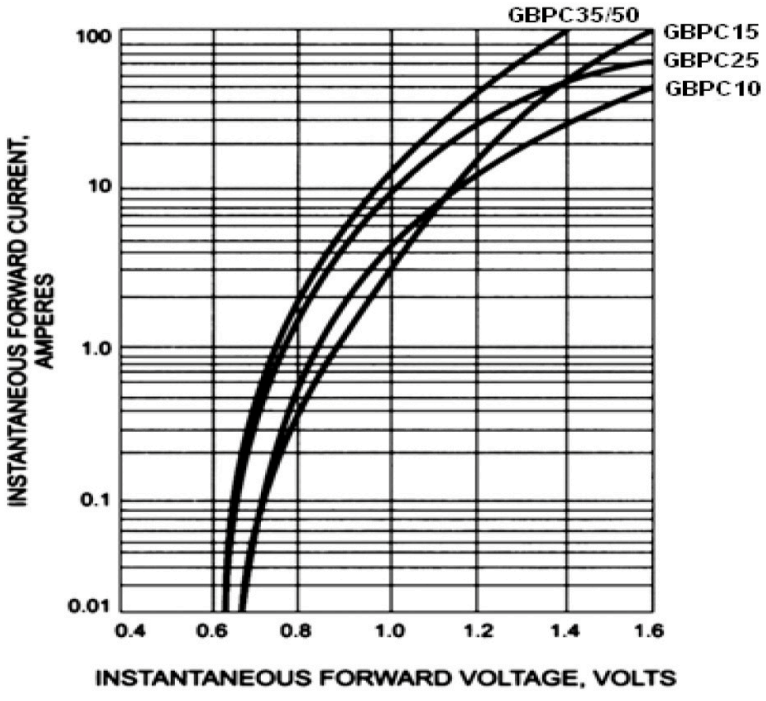


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS