

50 A GLASS PASSIVATED BRIDGE RECTIFIER

Reverse Voltage - 100 to 1000 V

Forward Current - 50 A

Features

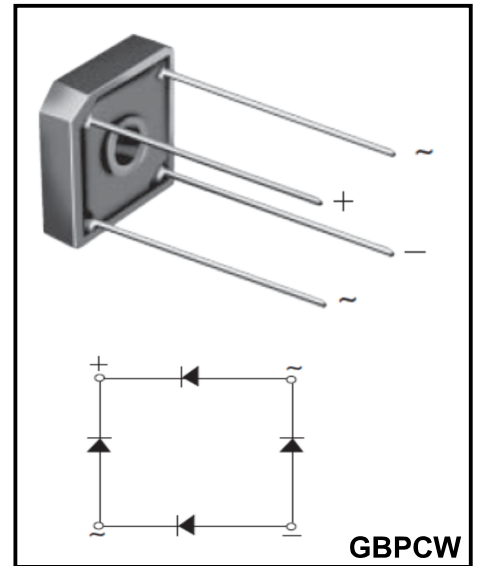
- ◆ Glass passivated die construction
- ◆ Low forward voltage drop
- ◆ High current capability
- ◆ High surge current capability
- ◆ Plastic material-UL flammability 94V-0
- ◆ Lead free in comply with EU RoHS 2011/65/EU directives

Mechanical Data

- ◆ Case: GBPCW
- ◆ Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- ◆ Polarity: As Marked on Case
- ◆ Mounting Position: Any
- ◆ Marking: Type Number
- ◆ Lead Free: For RoHS / Lead Free Version

Maximum Ratings and Electrical characteristics

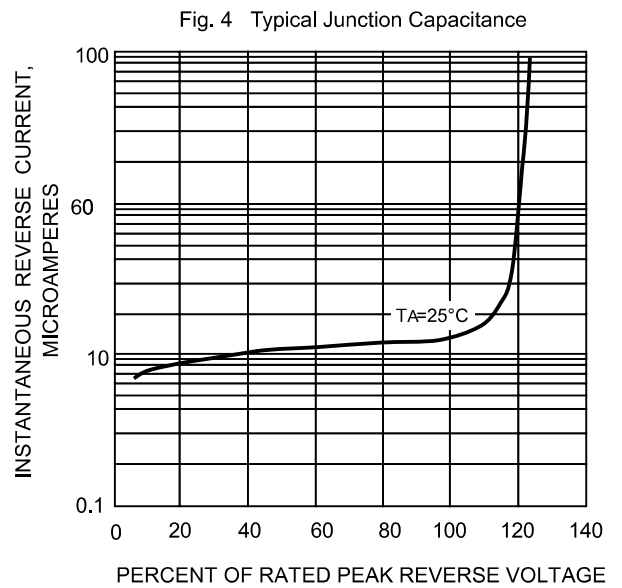
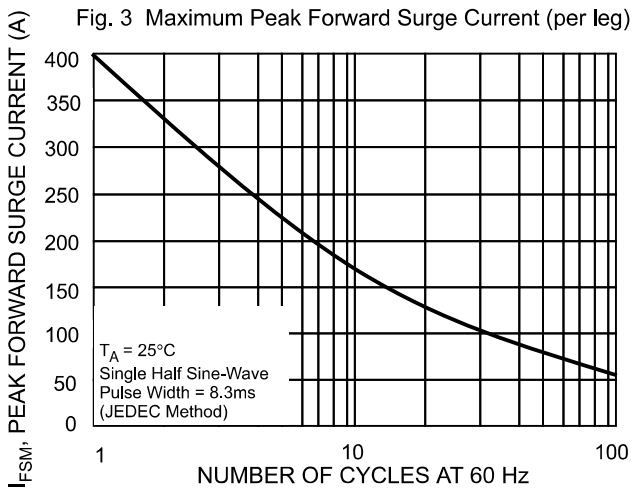
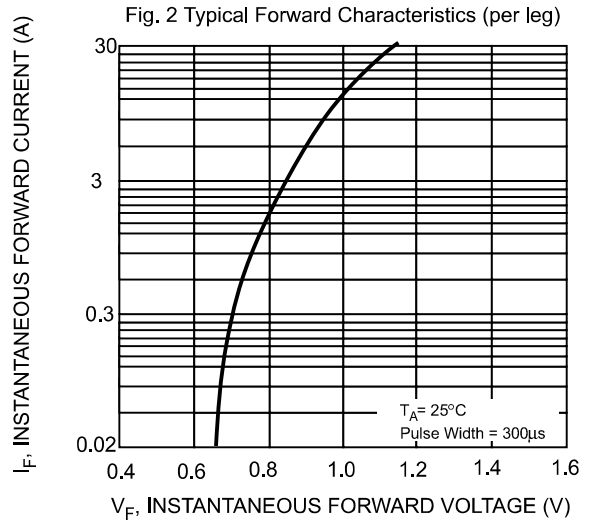
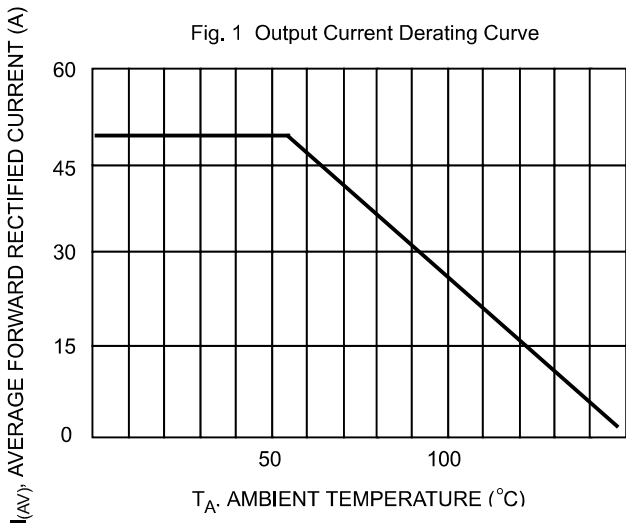
Ratings at 25 °C ambient temperature unless otherwise specified.



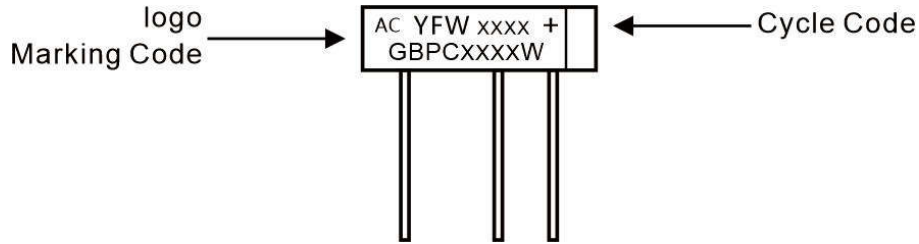
Parameter	Symbols	GBPC 5001W	GBPC 5002W	GBPC 5004W	GBPC 5006W	GBPC 5008W	GBPC 5010W	Units
Peak Repetitive Reverse Voltage	V_{RRM}	100	200	400	600	800	1000	V
Peak Repetitive Reverse Voltage	V_{RWM}	70	140	280	420	560	700	V
DC Blocking Voltage	V_{RMS}	100	200	400	600	800	1000	V
Average Rectified Output Current (Note1) @TA=55 °C	$I_{(AV)}$	50.0						A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	500						A
Forward Voltage per element @IF =25.0A	V_F	1.1						V
Peak Reverse Current @TA=25°C At Rated DC Blocking Voltage @TA=125°C	I_R	10.0 500						μA
Typical Junction Capacitance per leg	C_J	300						pF
Typical Thermal Resistance per leg (Note 2)	$R_{\theta JL}$	2.2						°C/W
Operating and Storage Temperature Range	T_j, T_{stg}	-55 ~ +150						°C

1. Mounted on glass epoxy PCB board with 1.3mm² solder pad.
2. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.

Ratings And Characteristic Curves



Marking Diagram



Ordering information

Package	Packing Description	Packing Quantity
GBPCW	bulk	50PCS/Box 500PCS/Carton

Package Dimensions

GBPCW

Dim.	Millimeter(mm)		DimensionsInInch	
	Min.	Max.	Min.	Max.
A	28.2	28.8	1.11	1.13
B	17.1	19.1	0.67	0.75
C	10.4	12.4	0.41	0.49
D	0.95	1.05	0.04	0.04
E	7.6	8.2	0.30	0.32
F	30	/	1.18	/

Hole for No.10 Screw
.193" (4.9) diam.

Disclaimer

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