

35A Single Phase Glass Passivated Bridge Rectifier

Reverse Voltage - 100 to 1000 V

Forward Current – 35 A

FEATURES

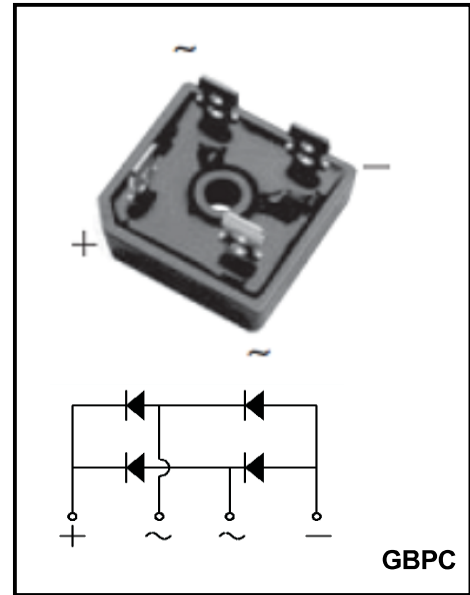
- † Glass passivated chip
- † Low reverse leakage current
- † High surge current capability

Applications

- † Electric welder
- † Industrial power supply
- † Inverter
- † Uninterruptible power supply

MECHANICAL DATA

- † Case: GBPC
- † Polarity: Polarity symbols being marked on body
- † Mounting torque: 12.0 kgf.cm max
- † Weight: About 20 grams



Maximum Ratings @ Ta = 25°C unless otherwise noted

Parameter	Symbols	GBPC 3501	GBPC 3502	GBPC 3504	GBPC 3506	GBPC 3508	GBPC 3510	GBPC 3512	Units
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	100	200	400	600	800	1000	1200	V
Maximum RMS Voltage	V_{RWM}	70	140	280	420	560	700	1140	V
Maximum DC Blocking Voltage	V_{RMS}	100	200	400	600	800	1000	1200	V
Maximum Average Forward Rectified Current @Tc=85 °C	$I_{(AV)}$	35							A
Peak surge forward current, 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	400							A
Rating for fusing 1ms<t<8.3ms Tj=25°C, Rating of per diode	I^2t	664							A ² S
Peak Forward Voltage per Diode at 17.5A DC	V_F	1.1							V
Maximum DC Reverse Current at Rated @Tj=25°C DC Blocking Voltage per Diode @Tj=125°C	I_R	5 500							uA
Dielectric strength terminals to case AC 1 minute	V_{dis}	2.5							KV
Operating and Storage Temperature Range	T_j, T_{stg}	-55 ~ +150							°C
Junction to ambient thermal resistance, without heatsink	$R_{\theta JA}$	26							°C/W
Junction to case thermal resistance, with heatsink	$R_{\theta JC}$	1.0							°C/W

Rating and Characteristic Curves

Fig. 1 - Forward Current Derating Curve

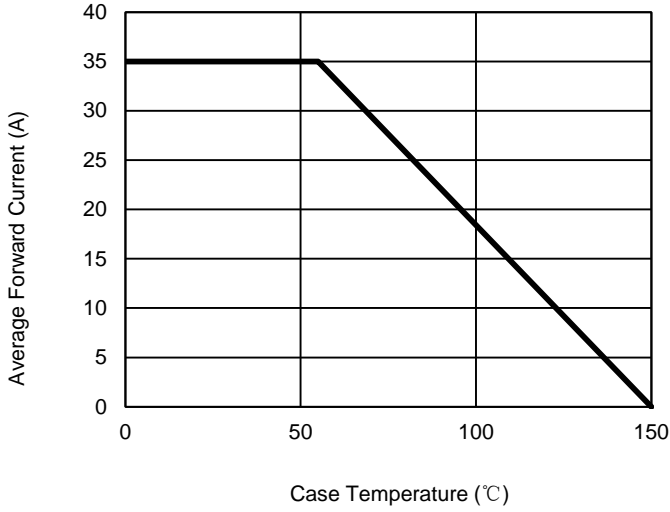


Fig. 2 - Maximum Non-Repetitive Surge Current

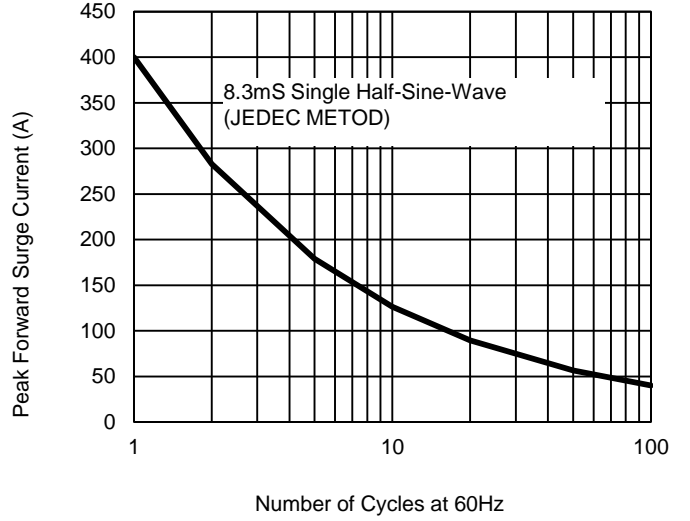


Fig. 3 - Typical Reverse Characteristics

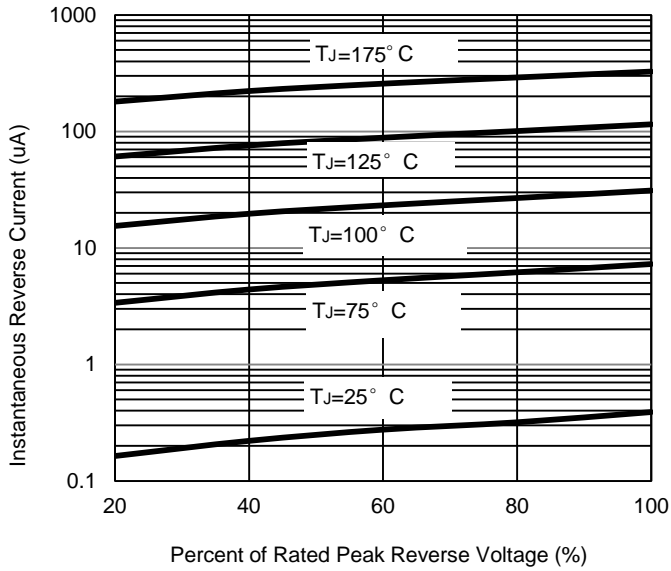
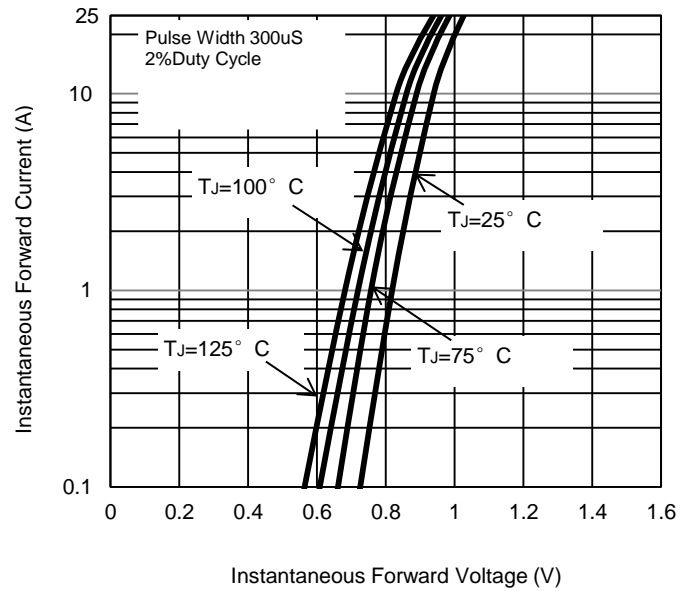
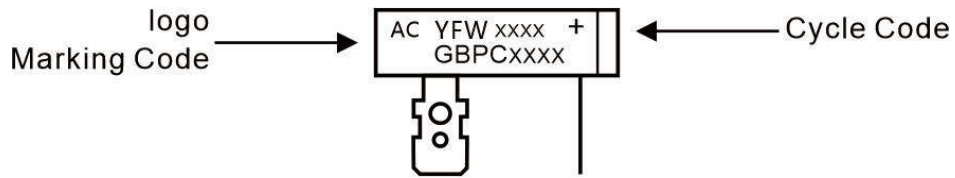


Fig. 4 - Typical Forward Characteristics



Marking Diagram



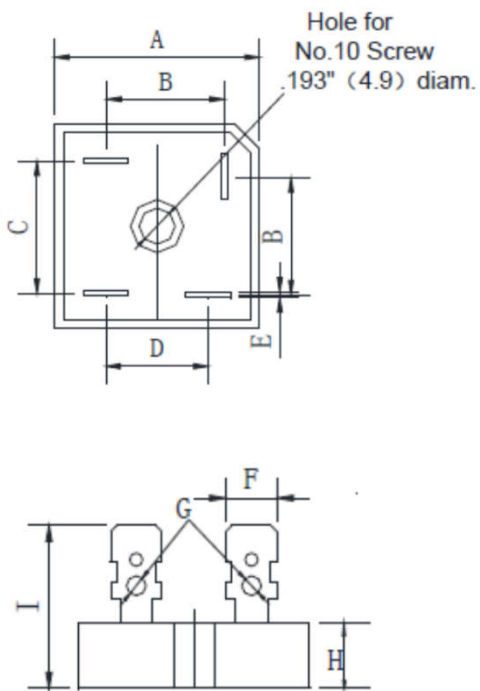
Ordering information

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

Package Dimensions

GBPC

Dim.	Millimeter(mm)		Dimensions inInch	
	Min.	Max.	Min.	Max.
A	28.2	28.8	1.11	1.13
B	15.3	17.3	0.602	0.681
C	17.1	19.1	0.67	0.75
D	13.2	15.2	0.520	0.598
E	0.75	0.85	0.0295	0.0335
F	6.2	6.4	0.244	0.252
G	2.2	2.6	0.087	0.102
H	7.6	8.2	0.30	0.32
I	19	-	0.75	-



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