

I<sup>2</sup>t Rating for Fusing (t<8.3mS)

Storage Temperature Range

Peak Forward Voltage per Diode at 17.5A DC

DC Blocking Voltage per Diode @Tj=125 $^\circ\!\mathrm{C}$ 

Operating Junction Temperature Range

Maximum DC Reverse Current at Rated @Tj=25°C

## GBPC35005 THRU GBPC3510

664

1.1

5

500 -55 to +150

-55 to +150

A<sup>2</sup>s

V

μA

°C

°C

Glass Passivated Bridge Rectifiers			Reverse Voltage - 50 to 1000 Volts Forward Current - 35 Amperes							
Features • Glass passivated chip • Low forward voltage drop • Meet UL flammability classification 94V-0 Mechanical Data • Polarity: Symbol marked on body • Mounting position: Any Applications		GBP	254 (6.4 242 (6.		<u>335 (8</u> 295 (7) <u>5</u> <u>5</u> <u>15</u> <u>5</u> <u>15</u> <u>5</u> <u>15</u> <u>5</u> <u>15</u> <u>5</u> <u>15</u> <u>1</u>	.5)  125 (23.5) 186 (22.5)			RoHS COMPLIANT	
<ul> <li>General purpose use in AC/DC bridge full wave rectification, for home appliances, office equipment, etc.</li> </ul>	Package Outline Dimensions in Inches (Millimeters)									
Maximum Ratings and Electrical Characterist										
Rating 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	GBPC	GBPC	GBPC	GBPC	GBPC	GBPC	GBPC	Unit	
		35005	3501	3502	3504	3506	3508	3510	Unit	
Maximum Repetitive Peak Reverse Voltage	Vrrm	50	100	200	400	600	800	1000	V	
Maximum RMS Voltage	Vrms	35	70	140	280	420	560	700	V	
Maximum Average Forward Rectified Current @Tc=55 $^\circ\!\!\!\!\!^\circ$	l(AV)				35				А	
Peak Forward Surge Current, 8.3mS Single Half Sine-Wave, Superimposed on Rated Load (JEDEC Method)	IFSM	400							А	

l<sup>2</sup>t

VF

ΙR

ΤJ

Tstg

## **Rating and Characteristic Curves GBPC35005 THRU GBPC3510**



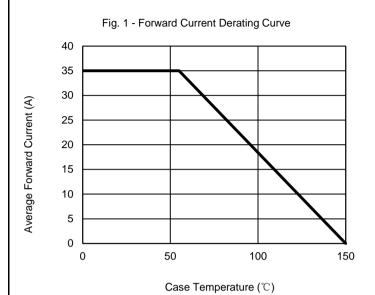
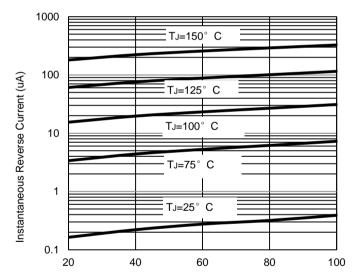
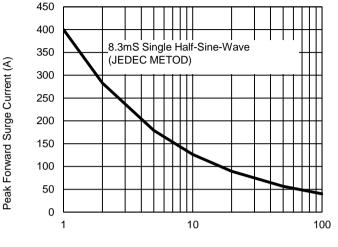


Fig. 3 - Typical Reverse Characteristics



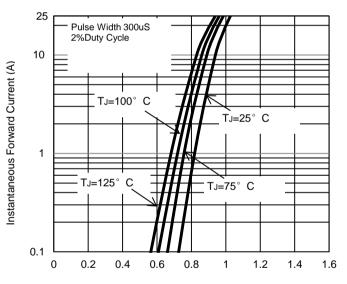
Percent of Rated Peak Reverse Voltage (%)

Fig. 2 - Maximum Non-Repetitive Surge Current



Number of Cycles at 60Hz

Fig. 4 - Typical Forward Characteristics



Instantaneous Forward Voltage (V)

The curve above is for reference only.