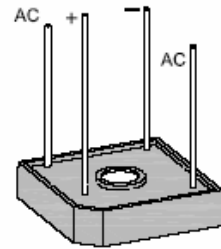


## 15A Glass Passivated Bridge Rectifier

### Features

- Glass passivated chip junction
- Integrally molded heatsink provides very low thermal Resistance for Maximmm heat dissipation
- Universal 3-way terminals; snap-on, wire wrap-around Or P.C.B mounting
- Typical  $I_R$  less than  $0.3\mu A$
- High forward surge current capability
- High temperature soldering guaranteed:  $260^\circ C/10$  seconds at 5lbs.(2.3kg) tension
- This series is UL recognized under component index, File number E194718
- RoHS Compliant



GBPC35W



### Mechanical Data

<b>Case:</b>	GBPC35W, Molded plastic with heatsink integrally mounted in the bridge encapsulation
<b>Epoxy:</b>	Plastic package has UL flammability classification 94V-0
<b>Terminals:</b>	Plated 0.25" (6.35mm) faston lugs
<b>Polarity:</b>	Polarity symbols molded on body
<b>Mounting Position</b>	See note 2
<b>Mounting Torque</b>	20in.-lb.Max
<b>Weight:</b>	18 grams

### Maximum Ratings And Electrical Characteristics ( $T_{amb}=25^\circ C$ )

Symbol	Description	GBPC 15-005W	GBPC 15-01W	GBPC 15-02W	GBPC 15-04W	GBPC 15-06W	GBPC 15-08W	GBPC 15-10W	Unit	Conditions
<b>VRRM</b>	Max. Repetitive Peak Reverse Voltage	50	100	200	400	600	800	1000	V	
<b>VRMS</b>	Max. RMS Voltage	35	70	140	280	420	560	700	V	
<b>VDC</b>	Max. DC blocking voltage	50	100	200	400	600	800	1000	V	

# 15A Glass Passivated Bridge Rectifier

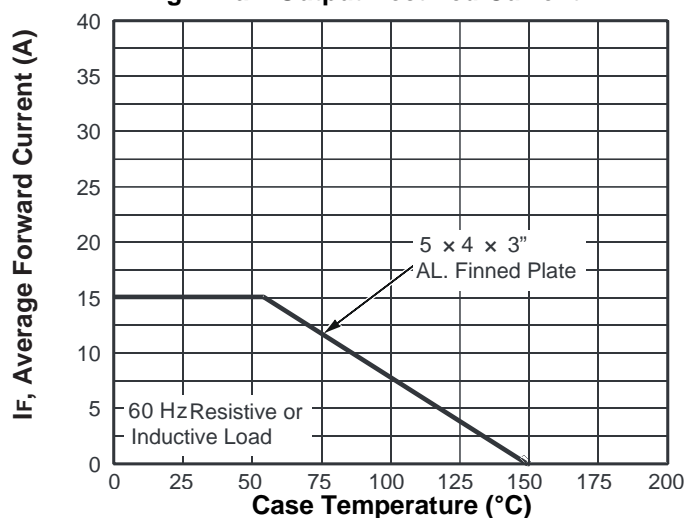
## GBPC15-005W - GBPC15-10W

<b>IF(AV)</b>	Max. Average Forward Rectified Output Current	15.0	A	See Fig.1
<b>IFSM</b>	Peak Forward Surge Current	300	A	8.3ms single half sine-wave superimposed on rated load (JEDEC method)
<b>VF</b>	Max. Instantaneous Forward Voltage drop per leg	1.1	V	IF(AV)=7.5A
<b>IR</b>	Max. Reverse DC Current At Rated DC Blocking Voltage per leg	5.0	μA	TC = 25°C
		500	μA	TC = 125°C
<b>I<sup>2</sup>t</b>	Rating for Fusing (1ms<t<8.3ms)	375	A <sup>2</sup> s	
<b>CJ</b>	Typical junction capacitance	300	pF	f=1MHz VR= 4V
<b>RthJc</b>	Typical Thermal Resistance per leg	1.9	°C / W	Note 1
<b>TJ,Tstg</b>	Operating Junction and Storage Temperature Range	-65 to +150	°C	

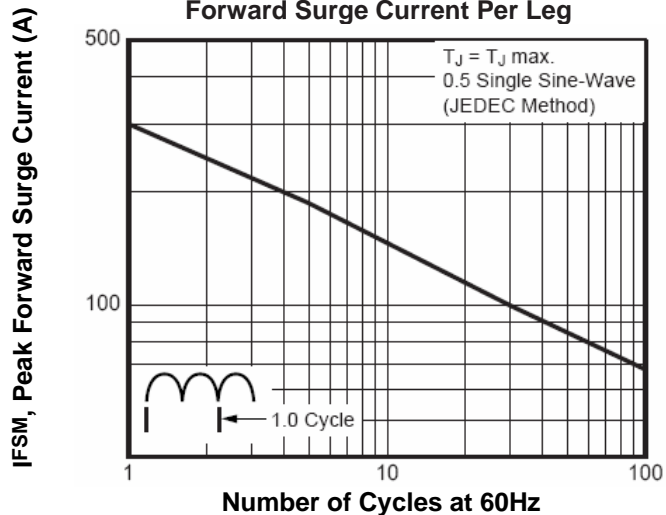
- Note:**
1. Thermal Resistance from junction to Case per leg.
  2. Bolt down on Heatsink with Silicone Thermal Compound Between and Mounting Surface for Maximum Heat Transfer with #10 Screw.

### Typical Characteristics Curves

**Fig.1-Max. Output Rectified Current**



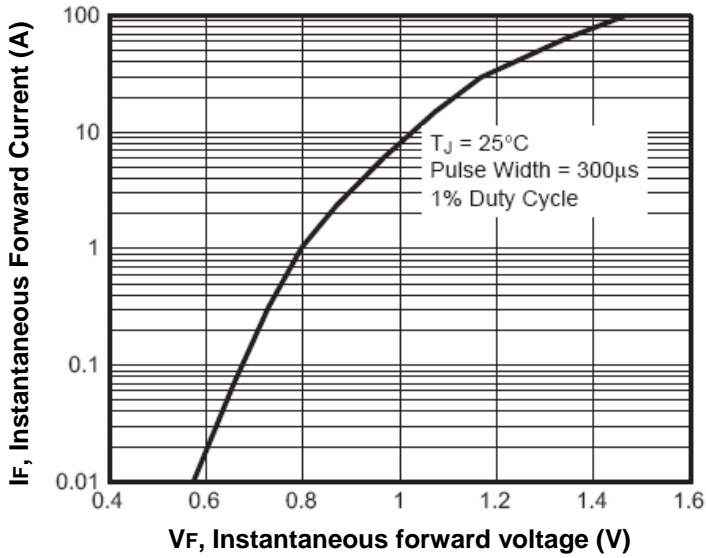
**Fig.2-Max. Non-repetitive Peak Forward Surge Current Per Leg**



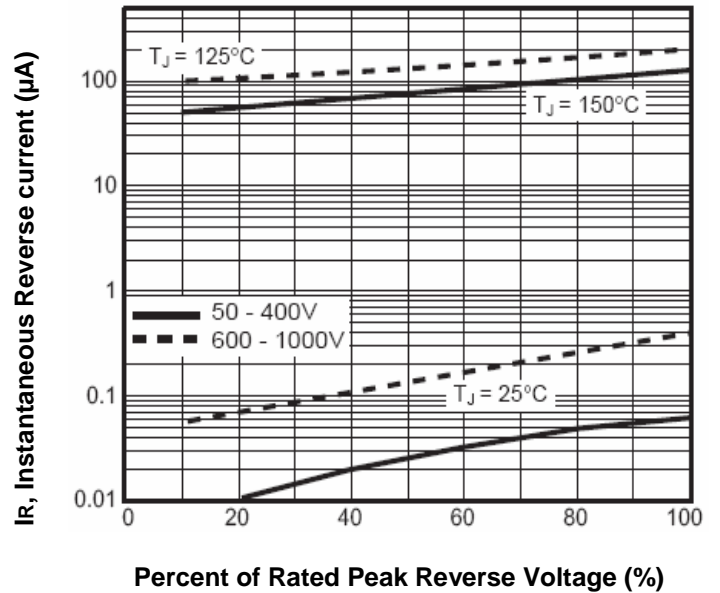
# 15A Glass Passivated Bridge Rectifier

## GBPC15-005W - GBPC15-10W

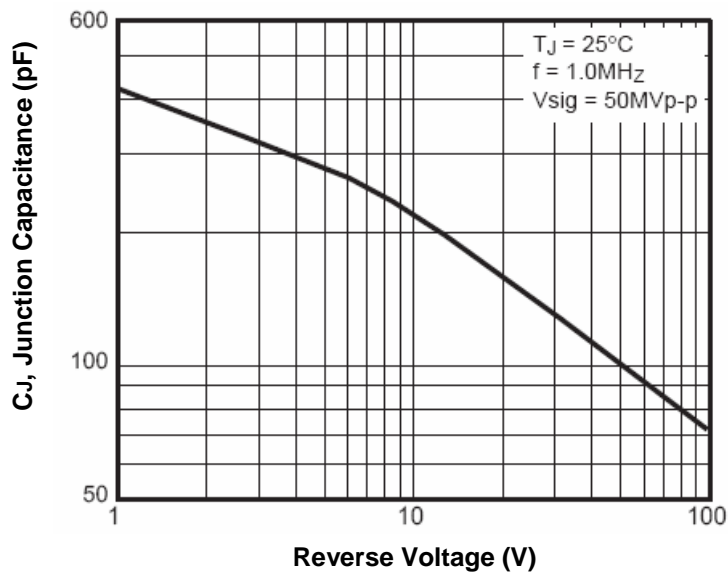
**Fig.3-Typical Instantaneous Forward Characteristic Per Leg**



**Fig.4-Typical Reverse Characteristics Per Leg**



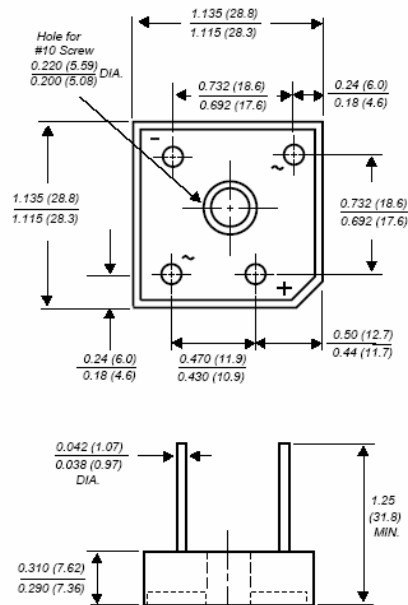
**Fig.5-Typical Junction Capacitance Per Leg**



# 15A Glass Passivated Bridge Rectifier

## GBPC15-005W - GBPC15-10W

### Dimensions in inch (mm)



### GBPC35W

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