

TAITRON

components incorporated

25A Glass Passivated Bridge Rectifier

GBPC25-005 - GBPC25-10

25A Glass Passivated Bridge Rectifier

Features

- Glass passivated chip junction
- Integrally molded heatsink provides very low thermal Resistance for Maxim 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



Mechanical Data

Case:	GBPC35, Molded plastic with heatsink integrally mounted in the bridge encapsulation
Epoxy:	Plastic package has UL flammability classification 94V-0
Terminals:	Plated 0.25" (6.35mm) faston lugs
Polarity:	Polarity symbols molded on body
Mounting Position	See note 2
Mounting Torque	20in.-lb.Max
Weight:	21 grams

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

Symbol	Description	GBPC 25-005	GBPC 25-01	GBPC 25-02	GBPC 25-04	GBPC 25-06	GBPC 25-08	GBPC 25-10	Unit	Conditions
VRRM	Max. Repetitive Peak Reverse Voltage	50	100	200	400	600	800	1000	V	
VRMS	Max. RMS Voltage	35	70	140	280	420	560	700	V	
VDC	Max. DC blocking voltage	50	100	200	400	600	800	1000	V	

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I_{F(AV)}	Max. Average Forward Rectified Output Current	25.0	A	See Fig.1
I_{FSM}	Peak Forward Surge Current	300	A	8.3ms single half sine-wave superimposed on rated load (JEDEC method)
V_F	Max. Instantaneous Forward Voltage drop per leg	1.1	V	I _{F(AV)} =12.5A
I_R	Max. Reverse DC Current At Rated DC Blocking Voltage per leg	5.0	μA	T _C = 25°C
		500	μA	T _C = 125°C
I²t	Rating for Fusing (1ms<t<8.3ms)	375	A ² s	
C_J	Typical junction capacitance	300	pF	f=1MHz V _R = 4V
R_{thJC}	Typical Thermal Resistance per leg	1.9	°C / W	Note 1
T_J,T_{STG}	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

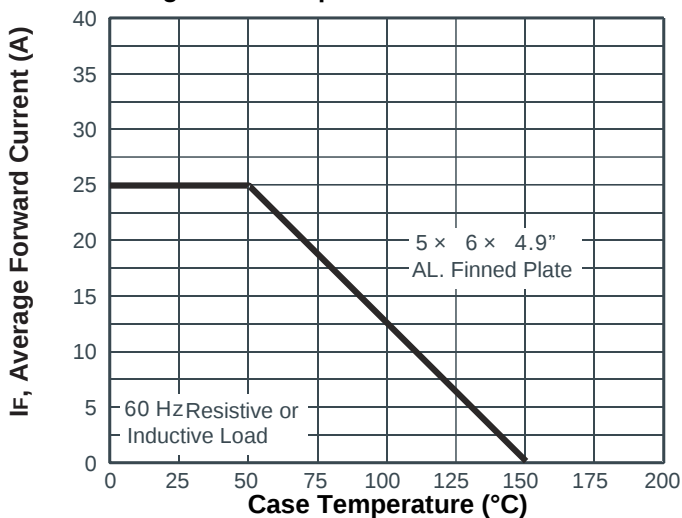
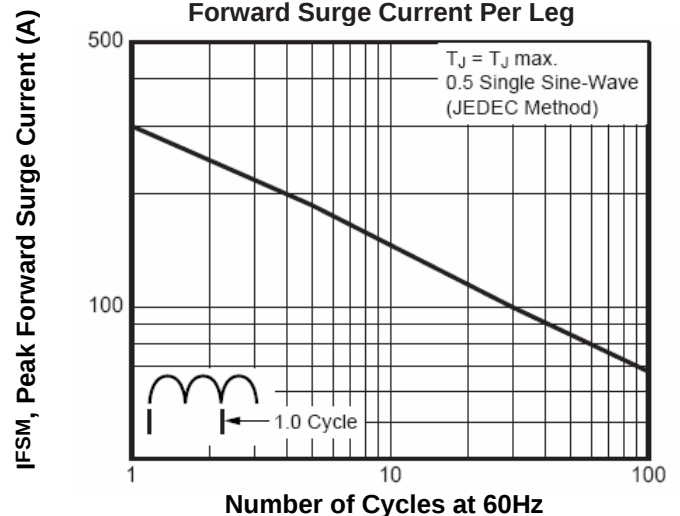


Fig.2-Max. Non-repetitive Peak Forward Surge Current Per Leg



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Fig.3-Typical Instantaneous Forward Characteristic Per Leg

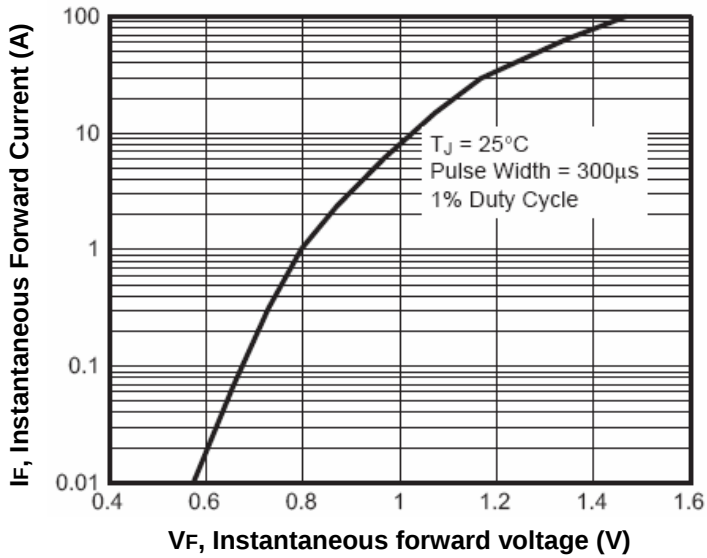


Fig.4-Typical Reverse Characteristics Per Leg

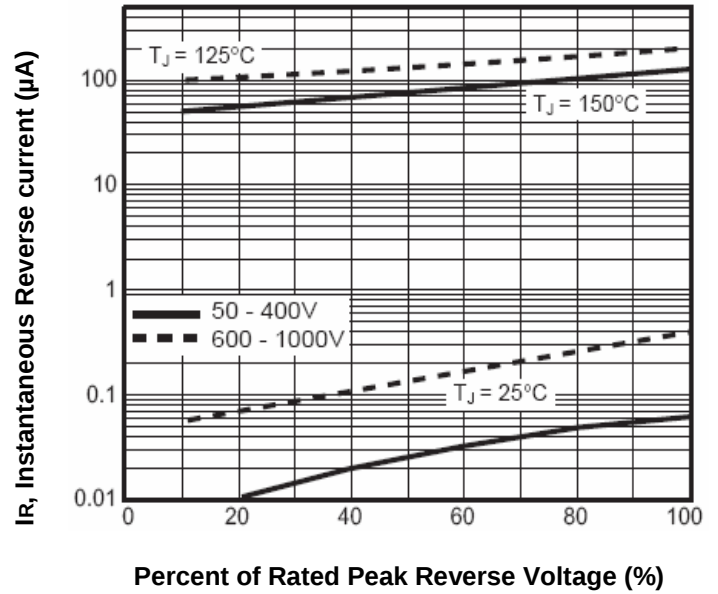
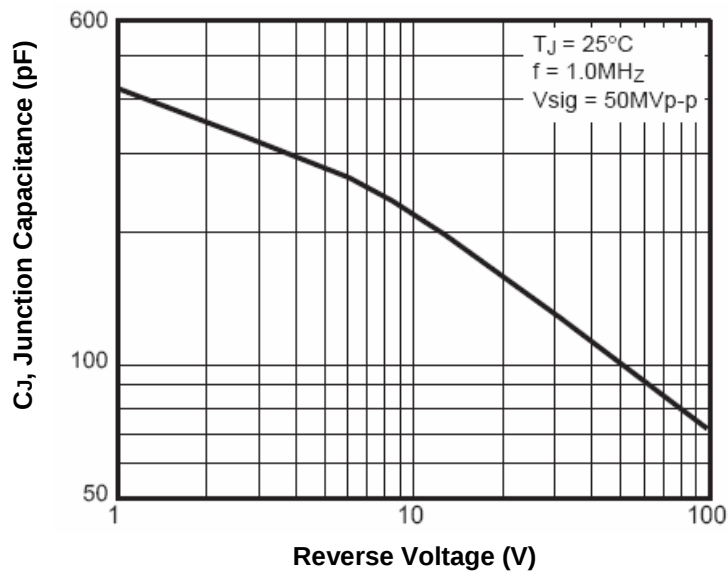


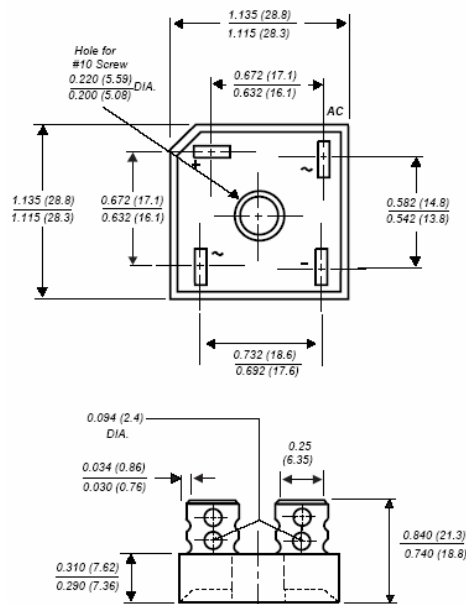
Fig.5-Typical Junction Capacitance Per Leg



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Dimensions in inch (mm)



GBPC35

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