Single Phase Bridge Rectifier

Features

- Plastic package has UL flammability classification 94V-0
- Integrally molded heatsink provides very low thermal Resistance for maximum heat dissipation
- High forward surge capability
- Glass passivated chip junction
- High isolation voltage from case to lugs
- Available in either lug package (GBPC35005) or wire lead package (GBPC3500W)
- High temperature soldering guaranteed: 260℃/10 seconds

Mechanical Data

Case:	Molded Plastic with intergrally mounted heatink
Polarity	Polarity symbols marked on case
Terminals:	Plated 0.25" (6.35mm) lug or plated 0.040"(1.02mm) diameter
Mounting torque	/
Mounting position:	Thru hole for #10 screw, 20 in-lbs torque max (see Note 1)
Weight:	0.53 ounce, 15.0 gram- GBPC35 and GBPC35-W

Maximum Ratings *($T_{Ambient}$=25ºC unless noted otherwise)*

Symbol	Description	GBPC 35005	GBPC 3501	GBPC 3502	GBPC 3504	GBPC 3506	GBPC 3508	GBPC 3510	Unit	Conditions
VRRM	Max Recurrent 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**	
I(AV)	Max Average Forward Rectified Current	35							**A**	(See Fig 1)
IFSM	Peak Forward Surge Current	400							**A**	8.3ms single half sine-wave (JEDEC method)
TJ,TSTG	Operating and Storage Temperature Range	-55 to +150							**℃**	
I2t	Rating for Fusing	660							**A2s**	T<8.3mS

Electrical Characteristics *($T_{Ambient}$=25ºC unless noted otherwise)*

Symbol	Description	GBPC 35005	GBPC 3501	GBPC 3502	GBPC 3504	GBPC 3506	GBPC 3508	GBPC 3510	Unit	Conditions
VF	Max Instantaneous Forward Voltage	1.1							**V**	Drop per Bridge element 17.5A
IR	Max DC Reverse Current at Rated DC Blocking Voltage	5.0							**μA**	TA=25℃
		500								Tc=125℃
VISO	Isolation Voltage from case to lugs	2500							**V**	
RθJC	Typical Thermal Resistance per leg	1.4							**℃/W**	
CJ	Typical Junction capacitance per leg	300							**pF**	Measured at 1.0MHz/4.0V

Note:

1. Bolt down on heat-sink with silicon thermal compound between bridge and mounting surface for maximum heat transfer with #10 screw

GBPC35005~GBPC3510

RATINGS AND CHARACTERISTIC CURVES GBPC35005 THRU GBPC3510

FIG.1–MAXIMUM OUTPUT RECTIFIED CURRENT

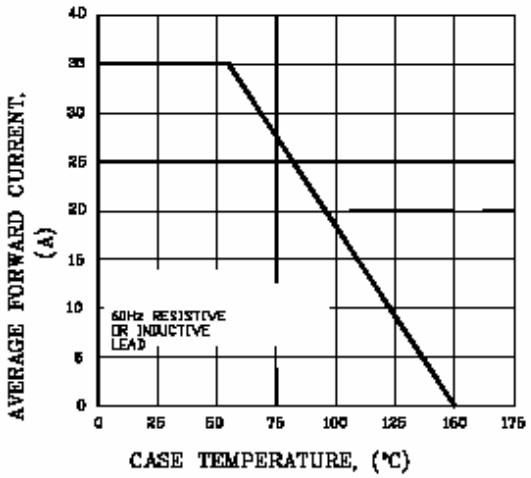
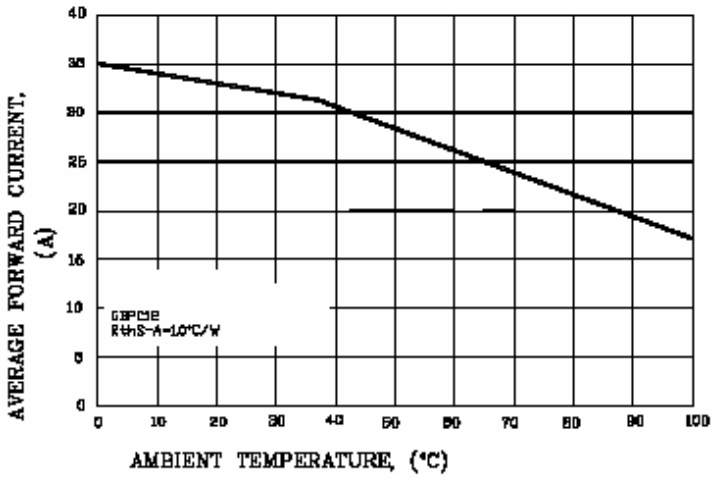


FIG.2–MAXIMUM OUTPUT RECTIFIED CURRENT



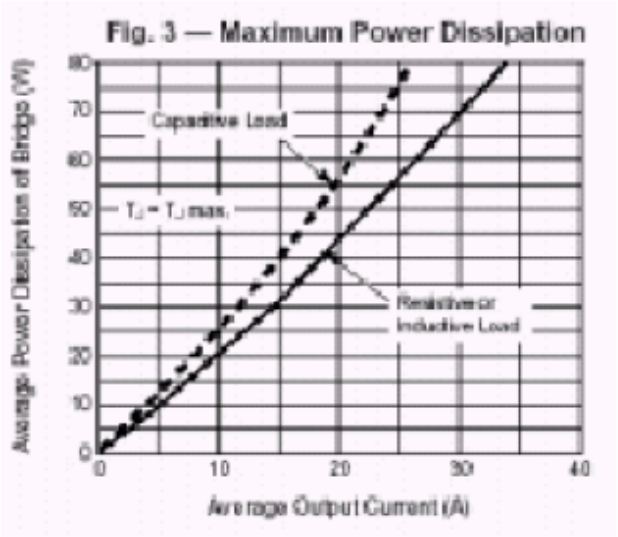
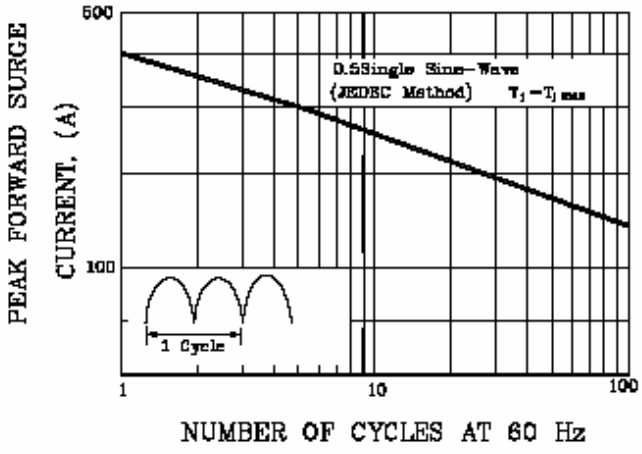
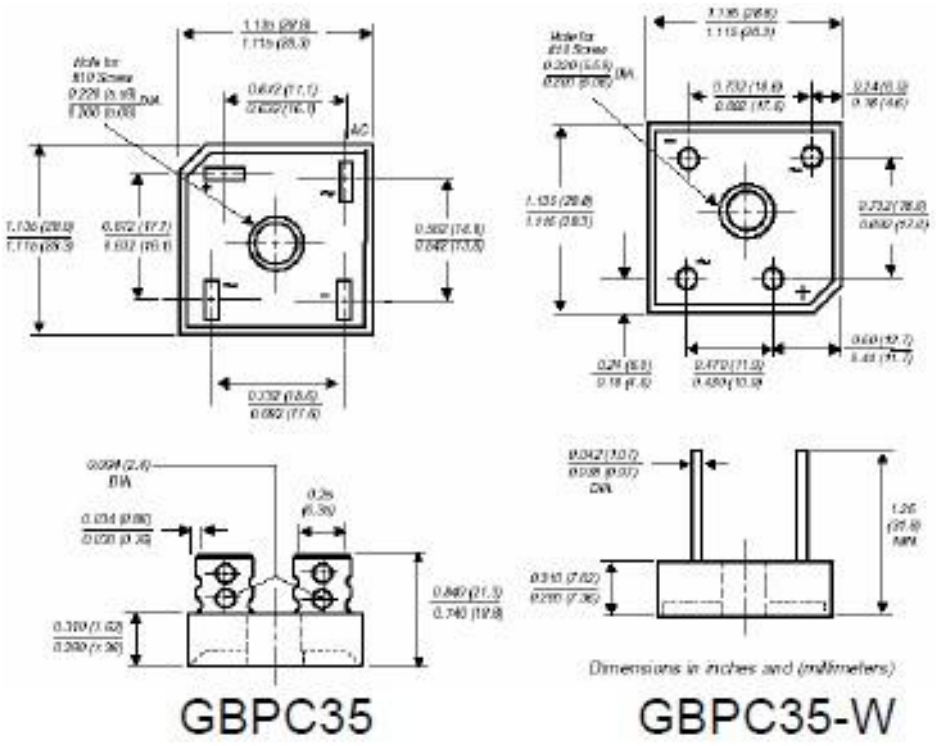


FIG.2–MAXIMUM NON–REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG



GBPC35005~GBPC3510

Dimensions in inches (mm)



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