

Single Phase Glass Passivated Silicon Bridge Rectifier

 $V_{RRM} = 600 \text{ V} - 1000 \text{ V}$ $I_{O} = 35 \text{ A}$

Features

- Integrally molded heat sink provides low thermal resistance for maximum heat dissipation
- · High surge current capability
- Universal 3-way terminals: snap on, wire-around, or P.C board mounting
- High temperature soldering guaranteed: 260°C/ 10 seconds at 5 lbs (2.3 kg) tension
- Not ESD Sensitive

Mechanical Data

Case: Molded plastic with heat sink integrally mounted in the bridge encapsulation

Terminals: Either nickel plated 0.25". Faston lugs or copper leads

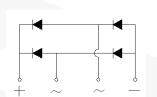
0.040" diameter.

Polarity: Polarrity symbols marked on the body

Mounting position: Bolt down on heat-sink with silicone thermal

compound between bridge and mounting surface

Weight: 15 grams or 0.53 ounces Mounting torque: 20 inch-lbs max









Maximum ratings at Tc = 25 °C, unless otherwise specified (GBPCXXXXT uses GBPC-T package while GBPCXXXXW uses GBPC-W package)

Parameter	Symbol Conditions	GBPC3506T/W	GBPC3508T/W	GBPC3510T/W	Unit
Repetitive peak reverse volt	age V _{RRM}	600	800	1000	V
RMS reverse voltage	V_{RMS}	420	560	700	V
DC blocking voltage	V_{DC}	600	800	1000	V
Operating temperature	T _j	-55 to 150	-55 to 150	-55 to 150	°C
Storage temperature	T_{stg}	-55 to 150	-55 to 150	-55 to 150	°C

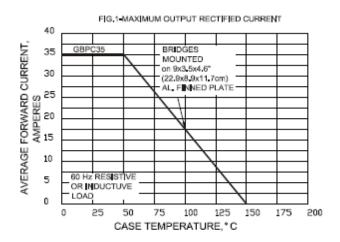
Electrical characteristics at Tc = 25 °C, unless otherwise specified

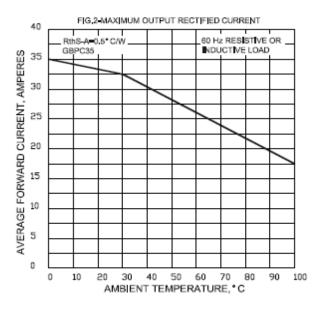
Single phase, half sine wave, 60 Hz, resistive or inductive load

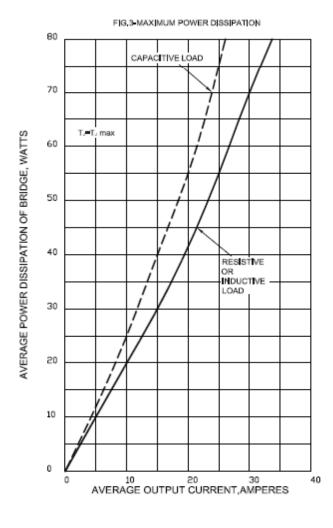
For capacitive load derate current by 20%

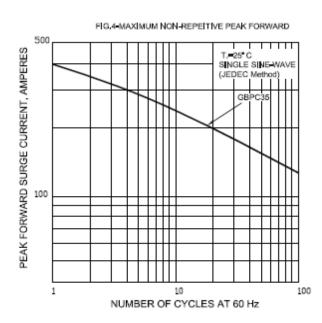
Parameter	Symbol	Conditions	GBPC3506T/W	GBPC3508T/W	GBPC3510T/W	Unit
Maximum average forward rectified current	I _O	T _c = 50 °C	35.0	35.0	35.0	А
Peak forward surge current	I _{FSM}	single sine-wave	400	400	400	Α
Maximum instantaneous forward voltage drop per leg	V_{F}	I _F = 17.5 A	1.1	1.1	1.1	V
Maximum DC reverse current at	I _R	T _a = 25 °C	5	5	5	μA
rated DC blocking voltage per leg		T _a = 125 °C	500	500	500	
Rating for fusing	l ² t	1 ms < $t_{\rm m}$ < 8.3 ms	660	660	660	A ² sec
RMS isolation voltage from case to leads	V_{ISO}		2500	2500	2500	V
Typical junction capacitance	C _j		300	300	300	pF
Typical thermal resistance	R_{oJC}		1.4	1.4	1.4	°C/W



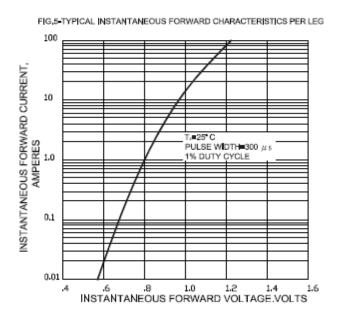


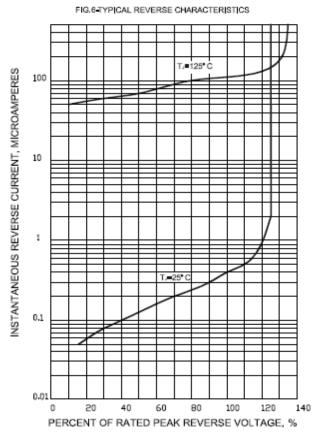


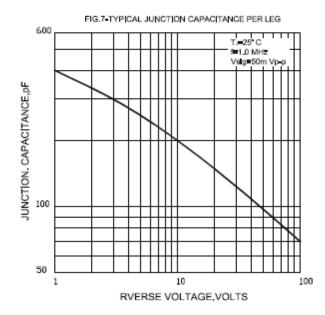


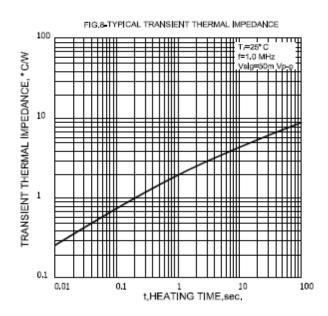








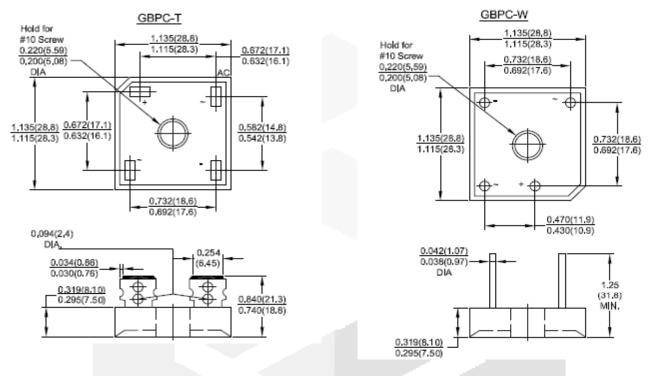


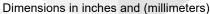


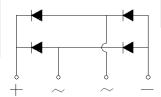


Package dimensions and terminal configuration

Product is marked with part number and terminal configuration.







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GBPC35010W GBPC35010T GBPC3508W GBPC3508T GBPC3506T GBPC3506W GBPC3510T GBPC3510W