# Suntan<sub>®</sub> Su<sub>®</sub>

## GBPC35005W THRU GBPC3510W

### SINGLE-PHASE BRIDGE RECTIFIER GLASS PASSIVATED BRIDGE RECTIFIERS REVERSE VOLTAGE 50 to 1000 Volts FORWARD CURRENT 35 Ampere

#### FEATURES

- ♦ Rating to 1000V PRV.
- ♦ High efficiency.
- ◆Glass passivated chip junction.
- ◆Electrically isolated metal case for maximum heat dissipation.
- ◆The plastic material has UL flammability

classification 94V-0.

♦ Electrically isolated base-2500 Volts

#### Mechanical Data

 $\bullet$  Case : Molded plastic with Heatsink internally mounted

in the bridge encapsulation.

- ◆Polarity: As marked on Body.
- ♦ Mounting : Hole for # 10 screw.
- ♦ Weight : 0.47 ounces , 13.4 grams (wire) .

#### **GBPC-W** 1.135(28.8) 1.115(28.3) .470(11.0) .430(10.9) .732(18.6) 1.135(28.8) 1.115(28.3) 592(17.6) 6) 732(18.6) .692 17 .042(1.07) .038(.97) 1.25 (31.8) MIN. 0.310(7.87) 0.290(7.36) .220(5.59) METAL HEAT SINK 0.200(5.08) HOLE FOR #10 SCREW

**Dimensions in inches and (millimeters)** 

#### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

#### 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%

PARAMETER	SYMBOL	GBPC 35005W	GBPC 3501W	GBPC 3502W	GBPC 3504W	GBPC 3506W	GBPC 3508W	GBPC 3510W	UNIT
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	Vrms	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	$V_{\text{DC}}$	50	100	200	400	600	800	1000	V
Maximum Average Forward(with heatsink Note 2) Rectified Current @ $T_C=110^{\circ}C$ (without heatsink)	I(AV)	35.0							А
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	Ifsm	400							А
Maximum forward Voltage at 17.5A DC	V <sub>F</sub>	1.1							V
Maximum DC Reverse Current @T <sub>J</sub> =25°C at Rated DC Blocking voltage @T <sub>J</sub> =125°C	Ir	5.0 500							μΑ
I <sup>2</sup> t Rating for fusing(t<8.3ms)	I <sup>2</sup> t	660							$A^2S$
Typical Junction Capacitance per element(Note 1)	C <sub>J</sub>	150							pF
Typical Thermal Resistance (Note 2)	Røjc	1.4							°C/W
Operating Temperature Range	T <sub>J</sub>	-55 to +150							°C
Storage Temperature Range	Tstg	-55 to +150							°C

Note: 1. Measured at non-repetitive, for greater than 1ms and less than 8.3ms.

2.Measured at 1.0M Hz and applied reversed voltage of 4.0 VDC.

3. Device mounted on 300mm x 300mm x 1.6mm Cu Plate Heatsink.

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#### **RATING AND CHARACTERISTIC CURVES GBPC35005W THRU GBPC3510W**

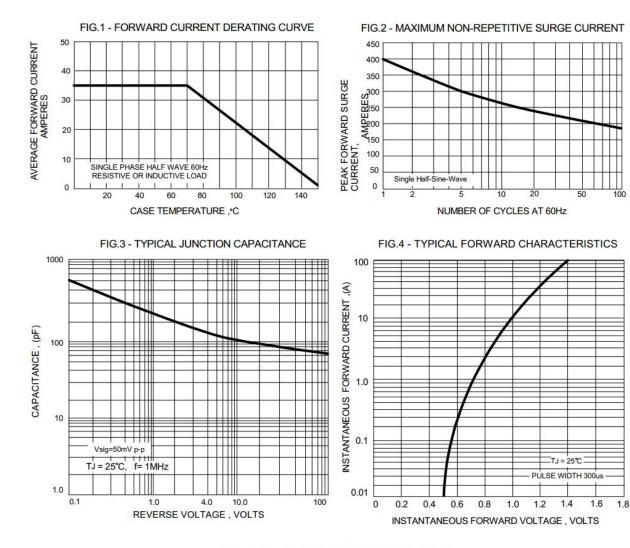
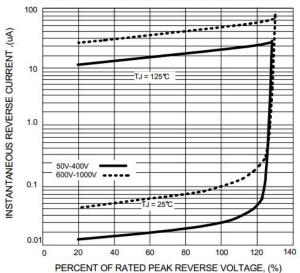


FIG.5 - TYPICAL REVERSE CHARACTERISTICS



Note: Specifications are subject to change without notice. For more detail and update, please visit our website.