

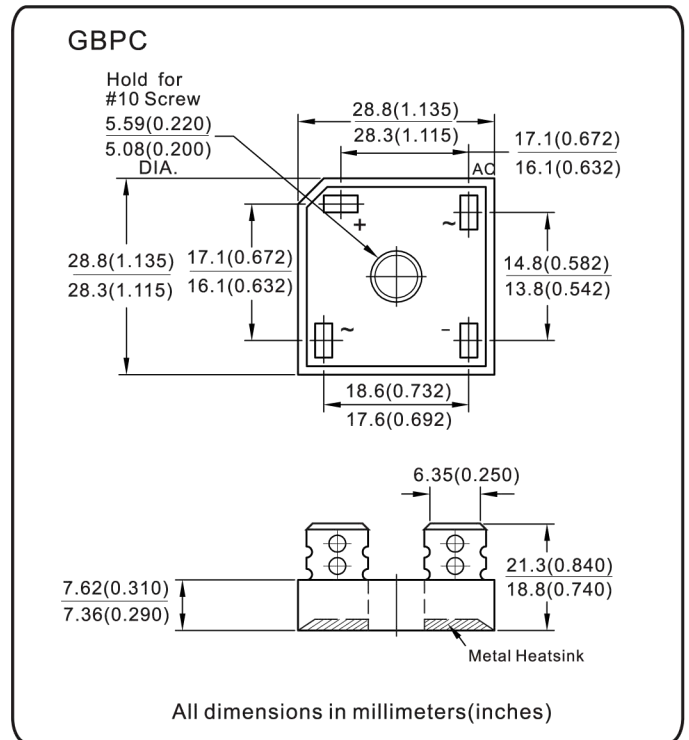
## Single Phase Glass Passivated Bridge Rectifiers

Voltage Range : 50 to 1600V

Current : 35 Amperes

### Features

- Integrally molded heatsink provides very low thermal resistance for maximum heat dissipation
- Glass passivated die construction
- High surge current capability
- High temperature soldering guaranteed : 260°C / 10 seconds, 0.375" (9.5mm) lead length, 5lbs (2.3kg) tension
- Electrically isolated base case to lead over 2500V



## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

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

For capacitive load , derate current by 20%.

Symbol	Specification	GBPC35										Units
		005	01	02	04	06	08	10	12	16		
V <sub>RRM</sub>	Max. recurrent peak reverse voltage	50	100	200	400	600	800	1000	1200	1600	V	
V <sub>RMS</sub>	Max. R <sub>MS</sub> voltage	35	70	140	280	420	560	700	840	980	V	
V <sub>DC</sub>	Max. DC blocking voltage	50	100	200	400	600	800	1000	1200	1600	V	
I <sub>o</sub>	Max. average forward rectified current at T <sub>c</sub> =50°C	35										A
I <sub>FSM</sub>	Peak forward surge current , single half sine-wave on rated load ( JEDEC Method ) T <sub>a</sub> =75°C	400										A
V <sub>F</sub>	Max. instantaneous forward voltage drop per leg at 17.5A	1										V
I <sub>R</sub>	Max. DC reverse current T <sub>J</sub> =25°C at rated DC blocking voltage per element T <sub>J</sub> =125°C	5.0 500.0										μA
I <sup>2</sup> <sub>t</sub>	I <sup>2</sup> <sub>t</sub> Rating for fusing ( t<8.3ms )	660										A <sup>2</sup> S
R <sub>thjc</sub>	Typical thermal resistance	1.4										°C/W
T <sub>j</sub>	Operating temperature range	-55 to +150										°C
T <sub>stg</sub>	Storage temperature range	-55 to +150										°C

FIG.1  
MAXIMUM OUTPUT RECTIFIED CURRENT

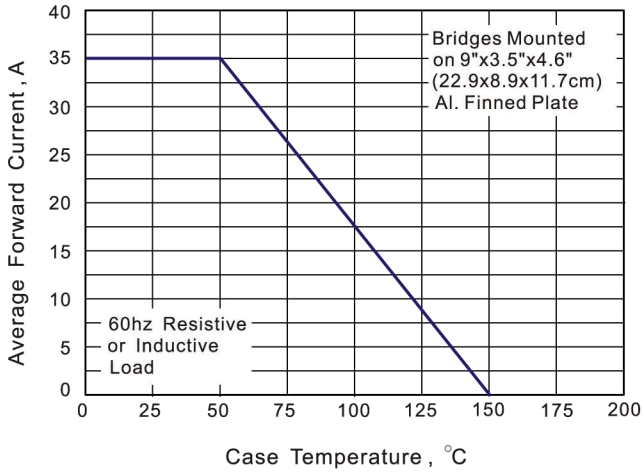


FIG.2  
MAXIMUM OUTPUT RECTIFIED CURRENT

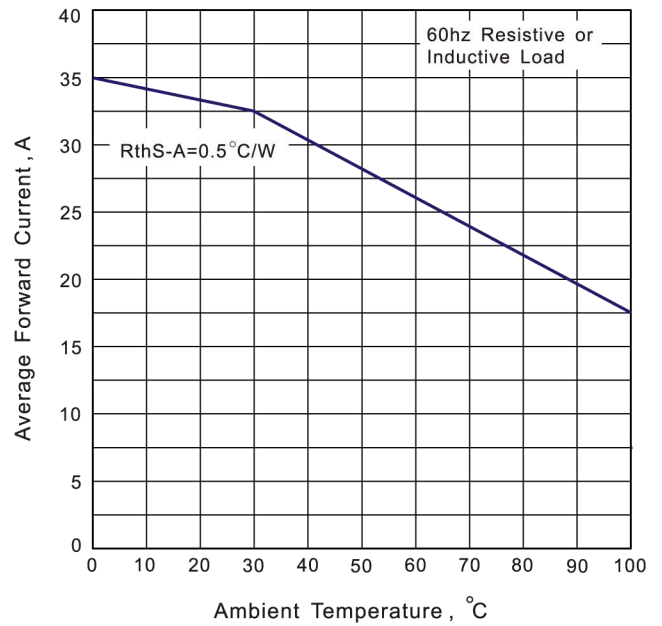


FIG.3  
MAXIMUM POWER DISSIPATION

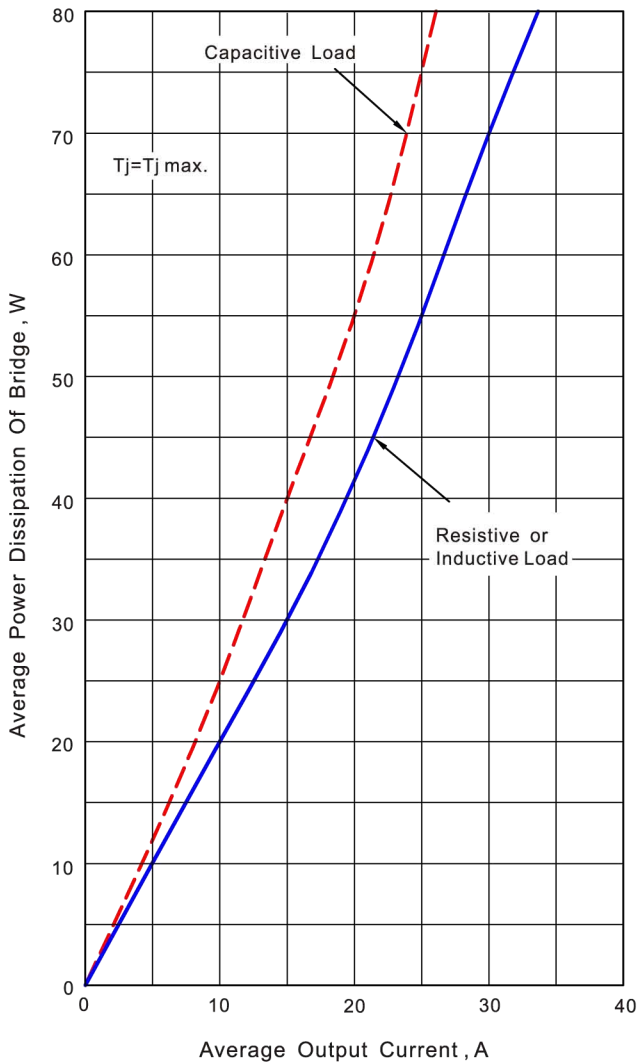


FIG.4  
MAXIMUM NON-REPETITIVE PEAK FORWARD

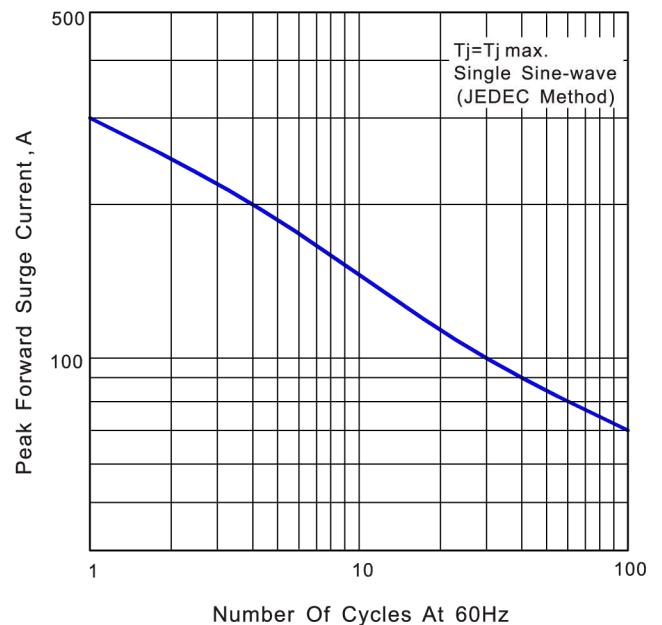


FIG.5 (PER LEG)  
TYPICAL INSTANTANEOUS CHARACTERISTICS

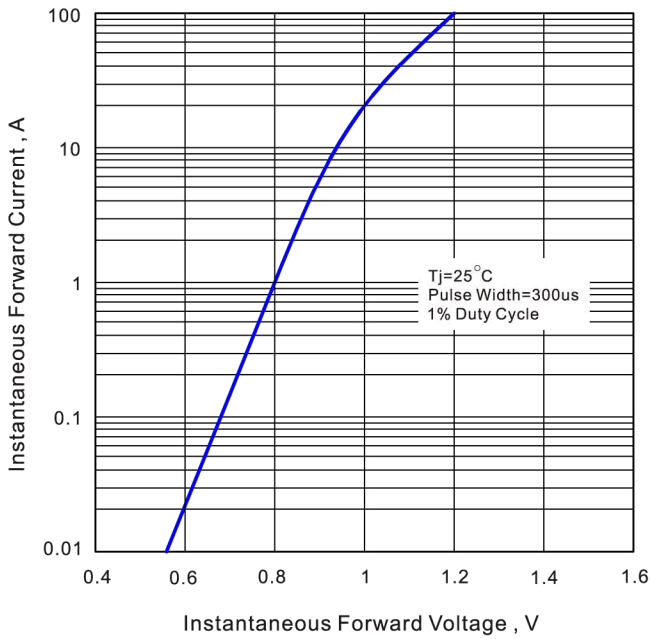


FIG.6  
TYPICAL REVERSE CHARACTERISTICS

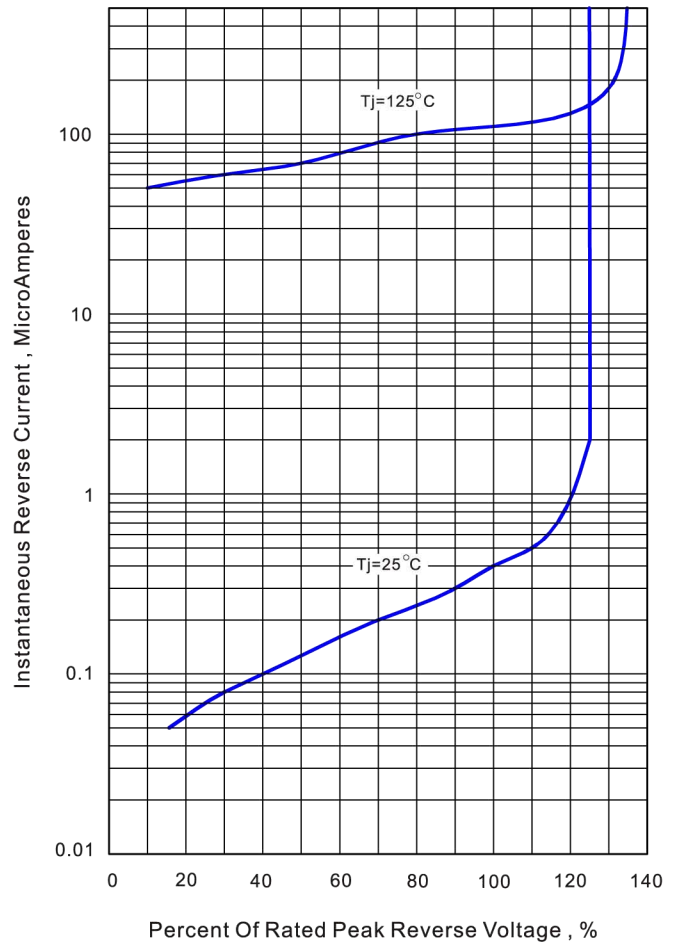


FIG.7  
TYPICAL JUNCTION CAPACITANCE (PER LEG)

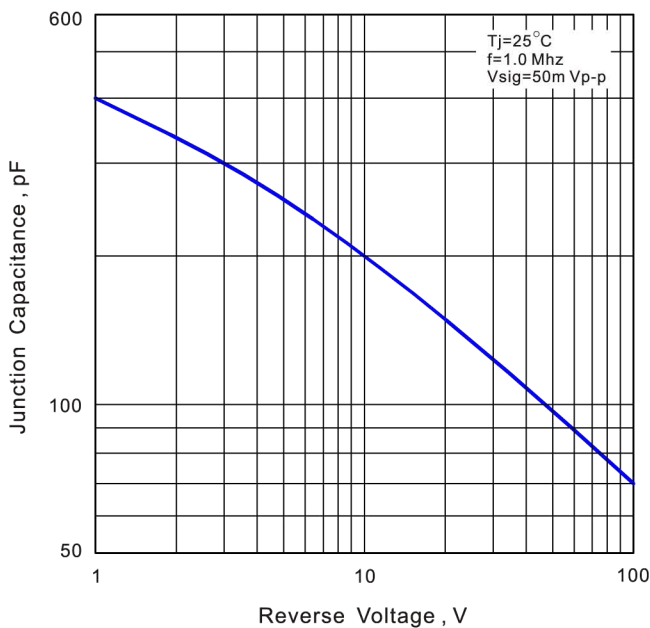


FIG.8  
TYPICAL TRANSIENT THERMAL IMPEDANCE

