

## 2KBP08M-E

### SINGLE PHASE GLASS PASSIVATED BRIDGE RECTIFIER

Voltage: 800V

Current: 2.0A



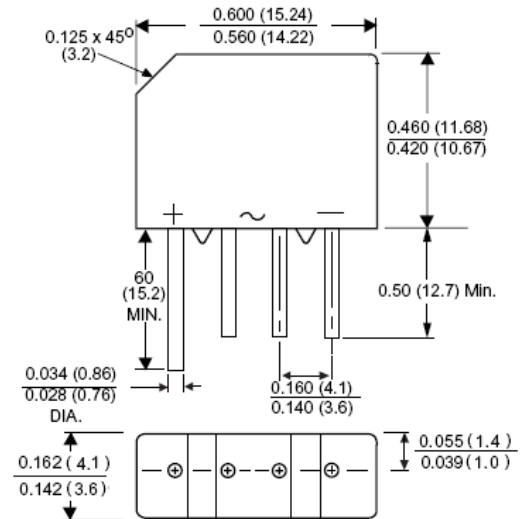
#### Features

Glass passivated chip junction  
High case dielectric strength  
High surge current capability  
Ideal for printed circuit board  
Halogen Free

#### Mechanical Data

Terminal: Plated leads solderable per MIL-STD 202E,  
Method 208C  
Case: UL-94 Class V-0 recognized Halogen Free Epoxy  
Polarity: As marked on body

#### KBPM



Dimensions in inches and (millimeters)

#### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(single-phase, half -wave, 60HZ, resistive or inductive load rating at 25°C, unless otherwise stated,  
for capacitive load, derate current by 20%)

	Symbol	2KBP08M-E	units
Maximum repetitive peak reverse voltage	V <sub>rrm</sub>	800	V
Maximum RMS voltage	V <sub>rms</sub>	560	V
Maximum DC blocking voltage	V <sub>dc</sub>	800	V
Maximum average forward rectified output current T <sub>a</sub> = 55°C	I <sub>f(av)</sub>	2.0	A
Peak forward surge current single sine-wave superimposed on rated load (JEDEC Method)	I <sub>fsm</sub>	60	A
Maximum instantaneous forward voltage drop per leg at 3.14A	V <sub>f</sub>	1.1	V
Rating for fusing (t < 8.3ms)	I <sup>2</sup> t	15	A <sup>2</sup> Sec
Maximum DC reverse current at rated DC blocking voltage per leg T <sub>a</sub> = 25°C T <sub>a</sub> = 125°C	I <sub>r</sub>	5.0 500	μA
Maximum thermal resistance per leg (Note1)	R <sub>th(ja)</sub> R <sub>th(jc)</sub>	30 11	°C/W
Typical junction capacitance per leg at 4.0V, 1MHz	C <sub>j</sub>	25	pF
Operating junction and storage temperature range	T <sub>j</sub> , T <sub>stg</sub>	-55 to +150	°C

Note:

1. Thermal resistance from junction to ambient and from junction to lead mounted on P.C.B. with 0.47 x 0.47" (12 x 12mm) copper pads

## RATINGS AND CHARACTERISTIC CURVES 2KBP08M-E

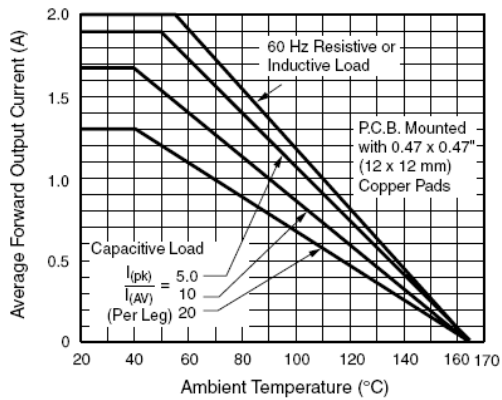


Figure 1. Derating Curve Output Rectified Current

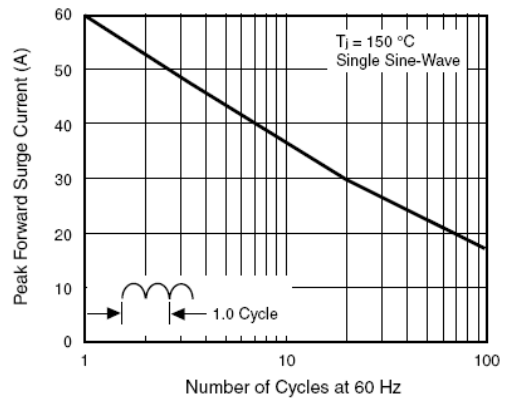


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current Per Diode

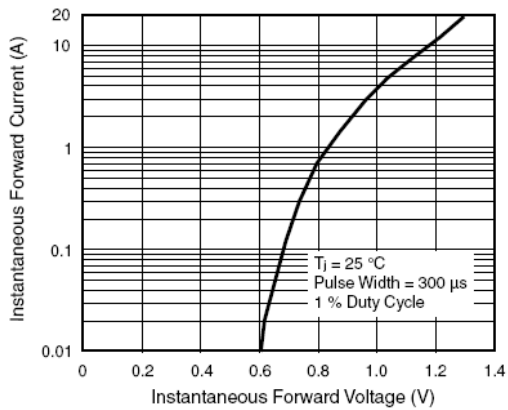


Figure 3. Typical Forward Characteristics Per Diode

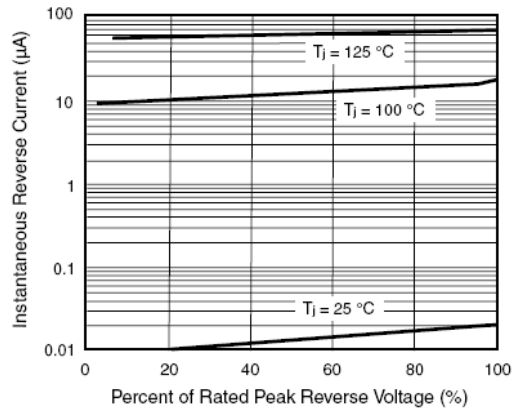


Figure 4. Typical Reverse Leakage Characteristics Per Diode

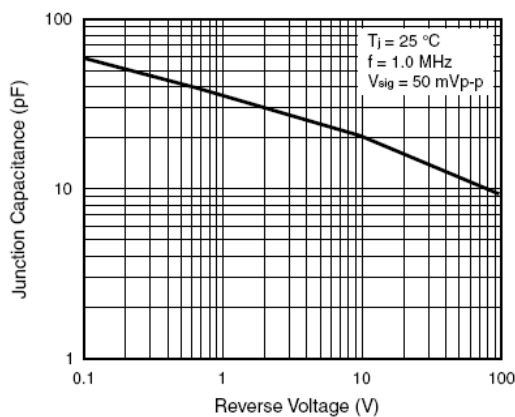


Figure 5. Typical Junction Capacitance Per Diode

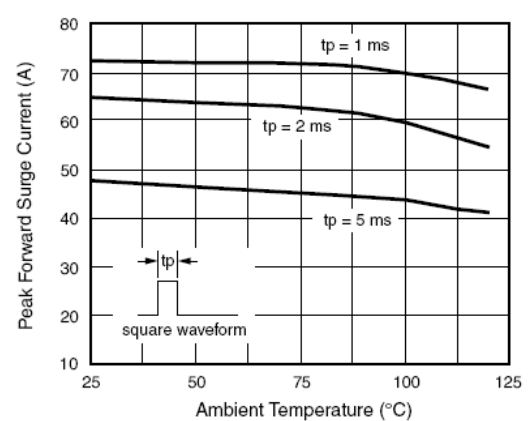


Figure 6. Non-Repetitive Peak Forward Surge Current Square Waveform