



**GLASS PASSIVATED BRIDGE RECTIFIERS**

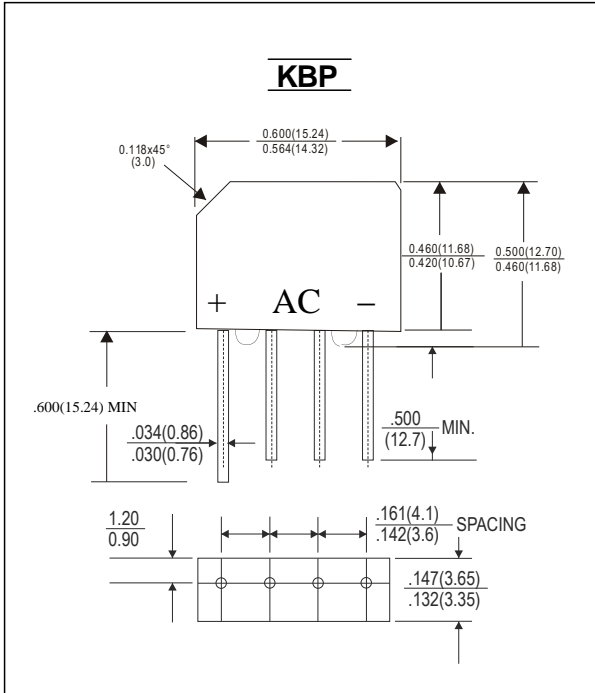
REVERSE VOLTAGE - 50 to 1000 Volts  
FORWARD CURRENT - 4.0 Amperes

**FEATURES**

- Rating to 1000V PRV
- Ideal for printed circuit board
- Reliable low cost construction utilizing molded plastic technique
- The plastic material has UL flammability classification 94V-0
- In compliance with EU RoHS 2002/95/EC directives

**MECHANICAL DATA**

- Polarity : As marked on Body
- Weight : 0.06 ounces, 1.7 grams
- Mounting position : Any



**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%

PARAMETER	SYMBOL	KBP 401G	KBP 402G	KBP 403G	KBP 404G	KBP 405G	KBP 406G	KBP 408G	UNIT
Maximum recurrent peak reverse voltage	VRRM	50	100	200	400	600	800	1000	V
Maximum RMS bridge input voltage	VRMS	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	VDC	50	100	200	400	600	800	1000	V
Maximum average forward rectified current @TA=50	IF	4.0							A
I <sup>2</sup> t Rating for fusing (t< 8.3ms)	I <sup>2</sup> t	41.5							A <sup>2</sup> sec
Peak forward surge current, single sine-wave superimposed on rated load (JEDEC method)	IFSM	100							A
Maximum instantaneous Forward Voltage Drop per element at 4.0A DC	VF	1.1							V
Maximum DC Reverse Current @TA=25 at Rated DC Blocking Voltage @TA=100	IR	5.0							uA
Typical junction capacitance per leg(note1)	CJ	35							pF
Typical Thermal Resistance Per leg (note2)	RJC	6.0							/W
Operating & Storage Temperature Range	TJ&TSTG	-55 to +150							

note1. Measured at 1.0MHz and applied reverse voltage of 4.0 volts

note2. Thermal resistance from junction to case with 0.47x0.47" (12x12mm) copper pads.



FIG.1- FORWARD CURRENT DERATING CURVE

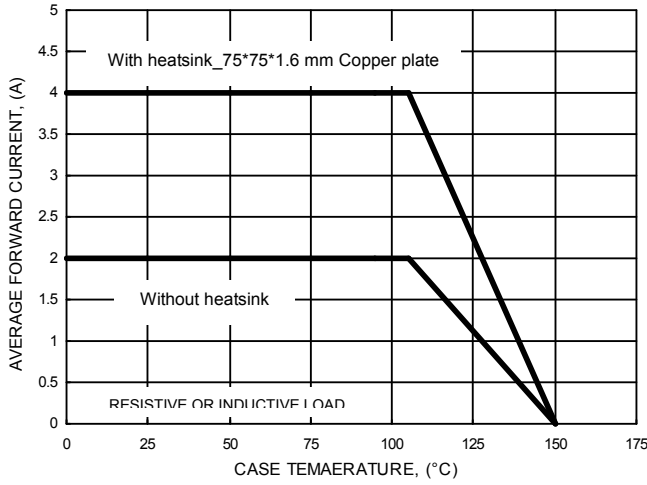


FIG.2- MAXIMUM NON-REPETITIVE SURGE CURRENT

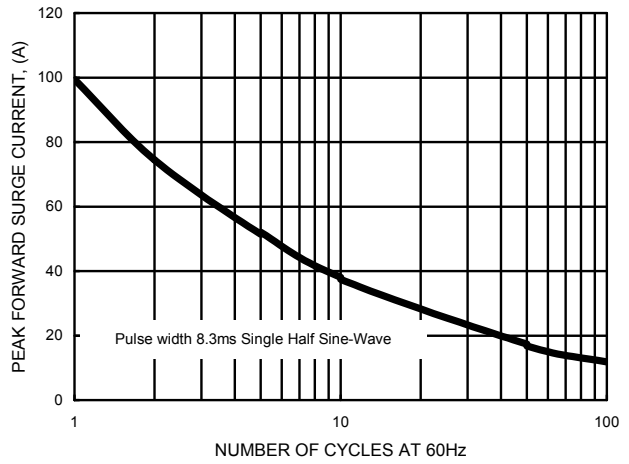


FIG.3- TYPICAL JUNCTION CAPACITANCE

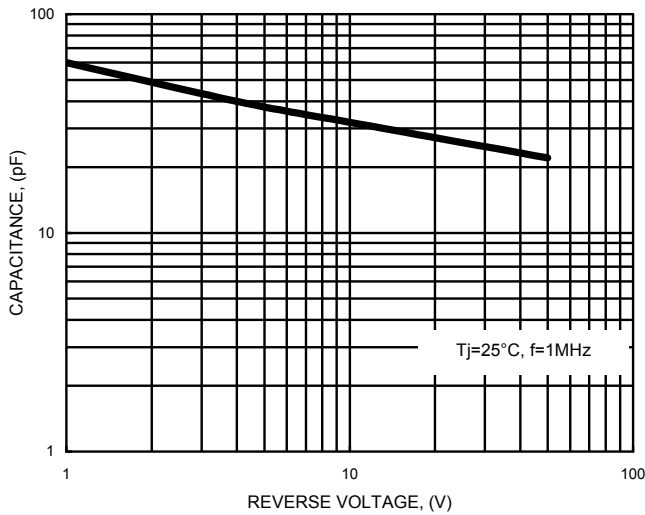


FIG.4- TYPICAL FORWARD CHARACTERISTICS

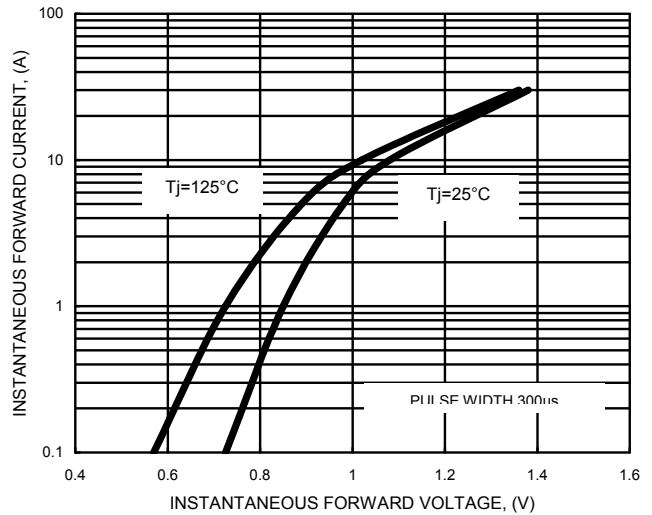


FIG.5- TYPICAL REVERSE CHARACTERISTICS

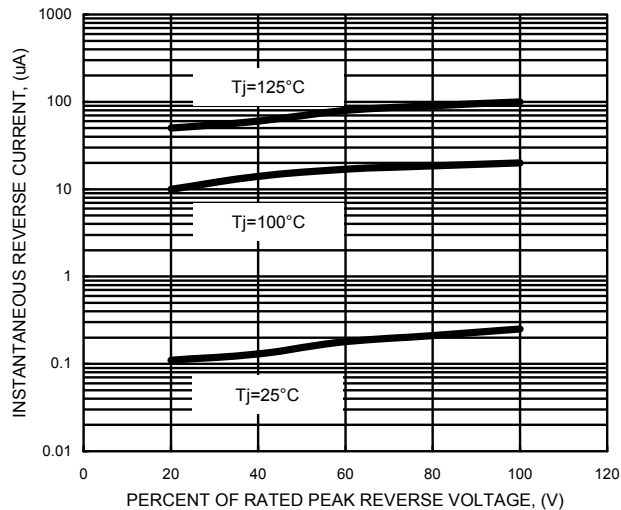


FIG.6- NON-REPETITIVE SURGE CURRENT

