KBP3005G THRU KBP310G

SINGLE PHASE SILICON BRIDGE RECTIFIER

Reverse Voltage - 50 to 1000 Volts Forward Current - 3.0 Ampere

FEATURES

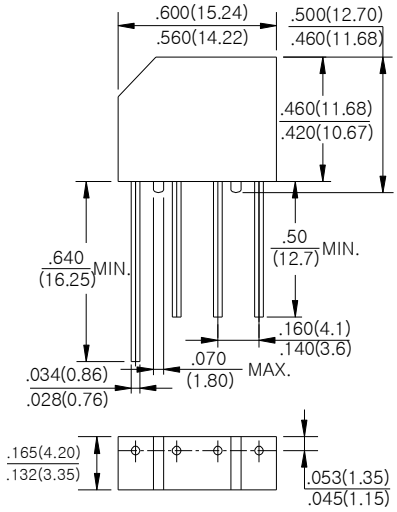
- Glass Passivated Die Construction
- Ideal for printed circuit board
- Surge overload rating: 60A peak
- High case dielectric strength
- High temperature soldering guaranteed: 260°C/10 seconds at 5lbs. (2.3kg) tension

MECHANICAL DATA

- Case: UL-94 Class V-0 recognized Flame Retardant Epoxy
- Terminals: Plated leads solderable per MIL-STD 202, method 208
- Mounting Position: Any
- Weight: 1.70 g
- Marking: Type Number

RoHS Compliant

KBP



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25℃ ambient temperature unless otherwise specified.
Single phase half-wave 60Hz,resistive or inductive load,for capacitive load current derate by 20%.

CHARACTERISTICS		SYMBOL	KBP3005G	KBP301G	KBP302G	KBP304G	KBP306G	KBP308G	KBP310G	UNITS
Maximum Recurrent Peak Reverse Voltage		V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Bridge Input Voltage		V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage		V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Output Current at T_A = 50°C		I_O	3.0							A
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method)		I_{FSM}	60							A
Maximum DC Forward Voltage Drop per Bridge Element at 3.0A DC		V_F	1.1							V
Maximum Reverse Current at rated DC Blocking Voltage per element	@T_A = 25°C	I_R	10.0							μA
	@T_A = 125°C		500							
Operating and Storage Temperature Range		T_J,T_{STG}	-55 to + 150							°C

Note1) Marking Code “G” : Glass Passivated Die Construction

KBP3005G THRU KBP310G

RATINGS AND CHARACTERISTIC CURVES

FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

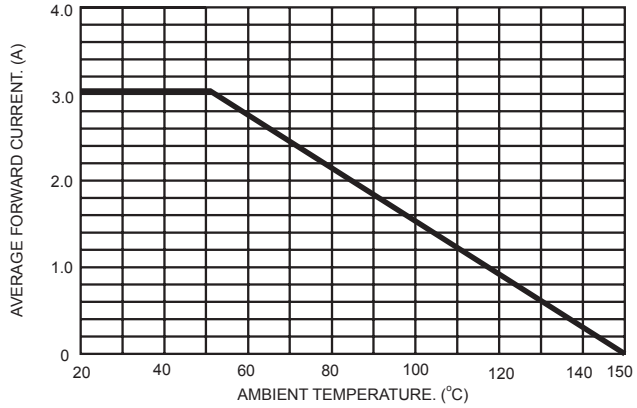


FIG.2- TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT

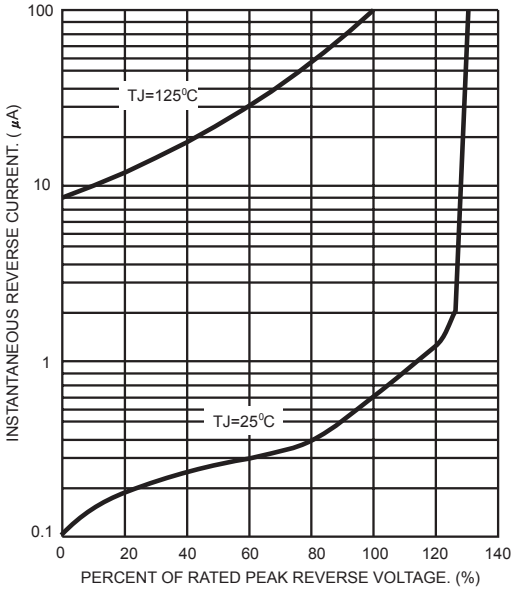


FIG.3- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER BRIDGE ELEMENT

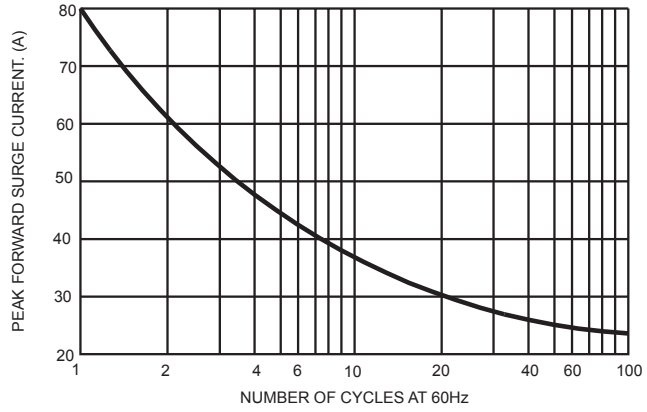


FIG.4- TYPICAL JUNCTION CAPACITANCE

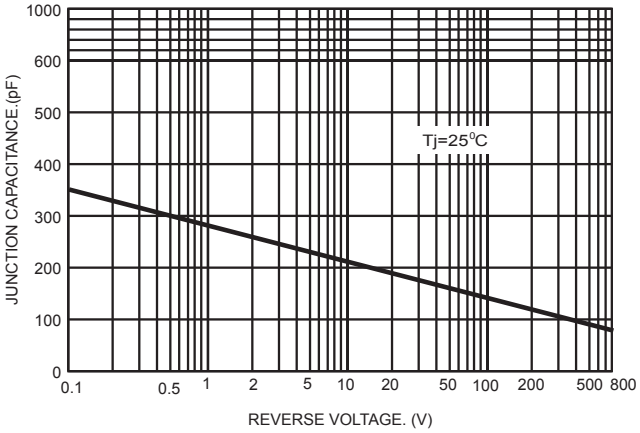


FIG.5- TYPICAL FORWARD CHARACTERISTICS PER BRIDGE ELEMENT