KBP301G THRU KBP307G

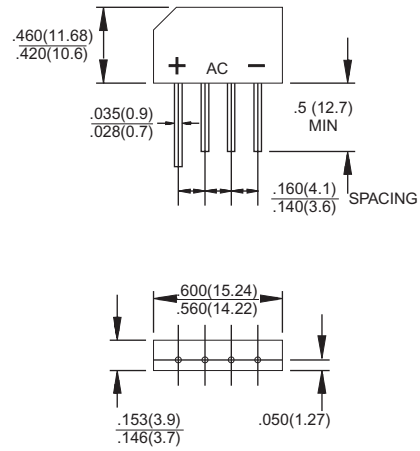
Single Phase 3.0 AMPS. Glass Passivated Bridge Rectifiers

Voltage Range
50 to 1000 Volts
Current
3.0 Amperes

Features

- ✧ UL Recognized File # E-96005
- ✧ Glass passivated junction
- ✧ Ideal for printed circuit board
- ✧ Reliable low cost construction technique results in inexpensive product
- ✧ High temperature soldering guaranteed: 260 ℃ / 10 seconds at 5 lbs. (2.3 Kg) tension
- ✧ Small size, simple installation Leads solderable per MIL-STD-202, Method 208

KBP



Dimensions in inches and (millimeters)

Maximum Ratings and Electrical Characteristics

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

Type Number	Symbol	KBP 301G	KBP 302G	KBP 303G	KBP 304G	KBP 305G	KBP 306G	KBP 307G	Units
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS 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 Rectified Current @T_A = 50℃	$I_{(AV)}$	3.0							A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	80							A
Maximum Instantaneous Forward Voltage @ 3.0A	V_F	1.1							V
Maximum DC Reverse Current @ T_A=25℃ at Rated DC Blocking Voltage @ T_A=125℃	I_R	10 500							uA uA
Typical Thermal Resistance (Note)	$R\theta_{JA}$ $R\theta_{JL}$	30 11							℃/W
Operating Temperature Range	T_J	-55 to +150							℃
Storage Temperature Range	T_{STG}	-55 to +150							℃

Note : Thermal Resistance from Junction to Ambient and from Junction to Lead Mounted on PCB With 0.4" x 0.4" (10mm x 10mm) Copper Pads.

RATINGS AND CHARACTERISTIC CURVES (KBP301G THRU KBP307G)

FIG.1- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER BRIDGE ELEMENT

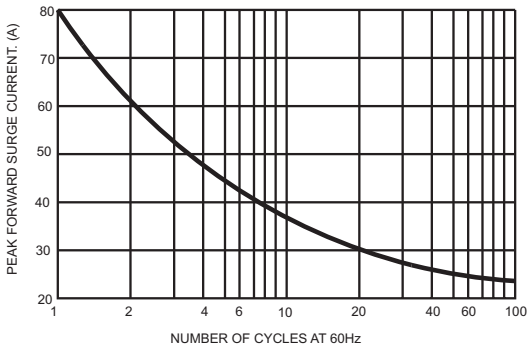


FIG.2- MAXIMUM FORWARD CURRENT DERATING CURVE

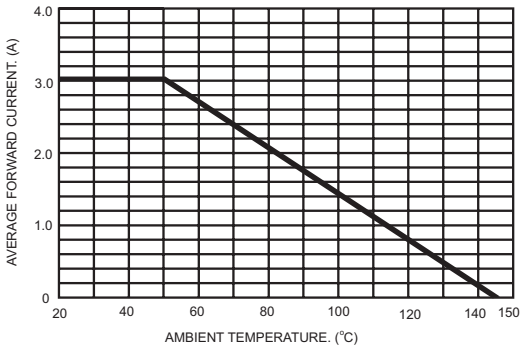


FIG.3- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER BRIDGE ELEMENT

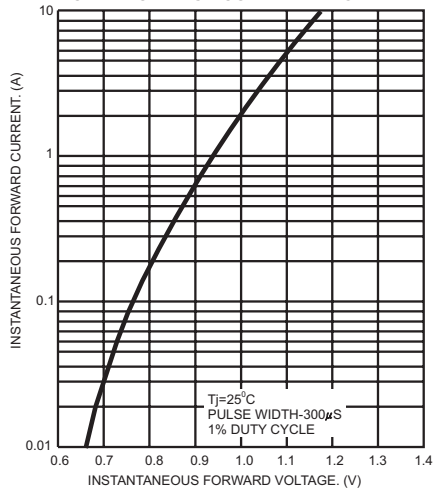


FIG.4- TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT