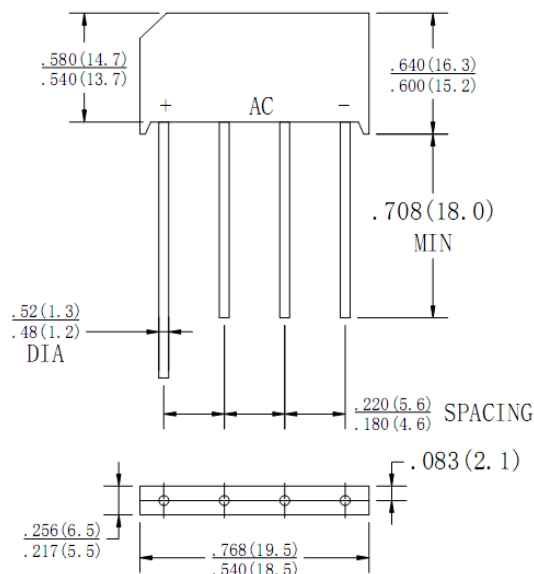




KBL601G - KBL607G Single Phase 6.0AMPS. Glass Passivated Bridge Rectifiers

KBL



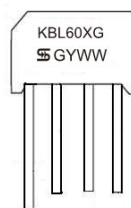
Features

- ✧ UL Recognized File #E-326243
- ✧ Glass passivated junction
- ✧ Ideal for printed circuit board
- ✧ Reliable low cost construction
- ✧ High surge current capability
- ✧ High temperature soldering guaranteed:
260°C/10 seconds at 5 lbs., (2.3kg) tension
- ✧ Green compound with suffix "G" on packing
code & prefix "G" on datecode

Mechanical Data

- ✧ Case: KBL
- ✧ Terminals: Leads solderable per MIL-STD-202,
Method 208
- ✧ Weight: 5.61 grams

Dimensions in inches and (millimeters)



Marking Diagram

- KBL60XG = Specific Device Code
 G = Green Compound
 Y = Year
 WW = Work Week

Maximum Ratings and Electrical Characteristics

Rating at 25 °C 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	KBL 601G	KBL 602G	KBL 603G	KBL 604G	KBL 605G	KBL 606G	KBL 607G	Unit
Maximum Repetitive 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 @ $T_A=50^\circ\text{C}$	$I_{F(AV)}$	6							A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	175							A
Rating for fusing ($t < 8.3\text{ms}$)	I^2T	127							A ² S
Maximum Instantaneous Forward Voltage (Note 1) @3.0A @6.0A	V_F	1.0 1.1							V
Maximum DC Reverse Current at Rated DC Block Voltage @ $T_A=25^\circ\text{C}$ @ $T_A=125^\circ\text{C}$	I_R	10 500							uA
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$ $R_{\theta JL}$	13 7.5							°C/W
Operating Temperature Range	T_J	- 55 to + 150							°C
Storage Temperature Range	T_{STG}	- 55 to + 150							°C

Note 1 : Pulse Test with PW=300 usec, 1% Duty Cycle

Note 2 : Thermal Resistance Measures on Al. Plate at 3" x 5" x 0.25"

RATINGS AND CHARACTERISTIC CURVES (KBL601G THRU KBL607G)

FIG. 1 FORWARD CURRENT DERATING CURVE

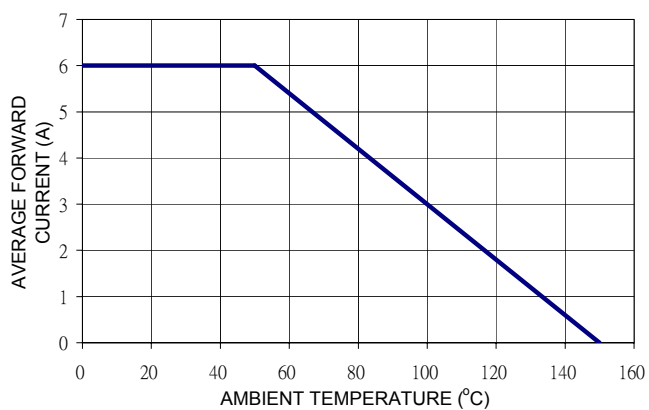


FIG. 2 TYPICAL REVERSE CHARACTERISTICS

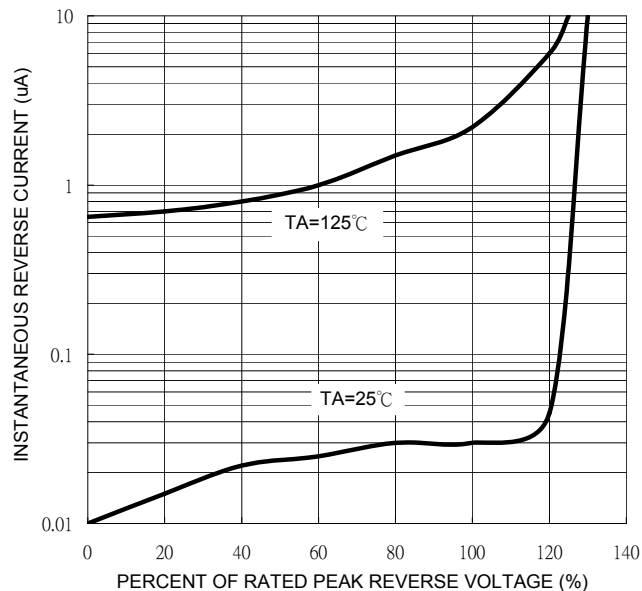


FIG. 3 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

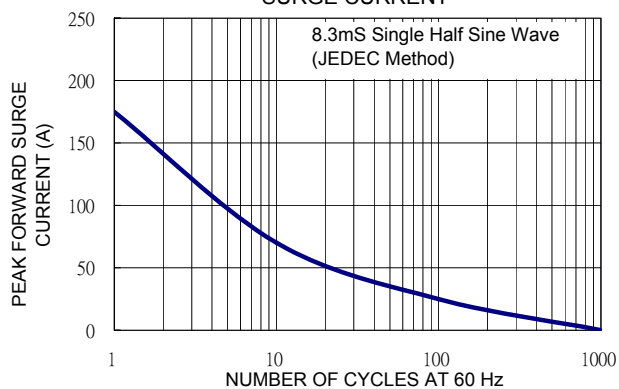


FIG. 4 TYPICAL JUNCTION CAPACITANCE

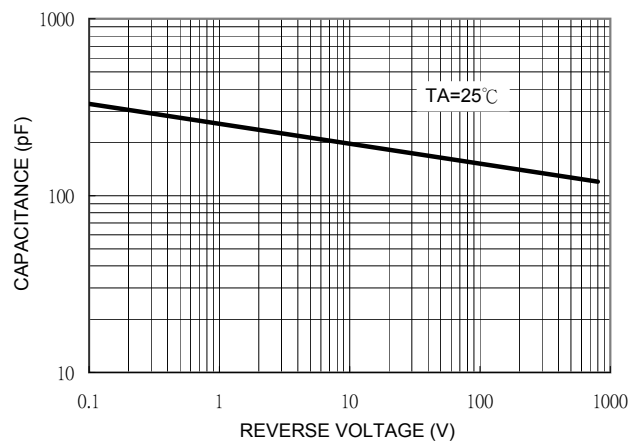


FIG. 5 TYPICAL FORWARD CHARACTERISTICS

