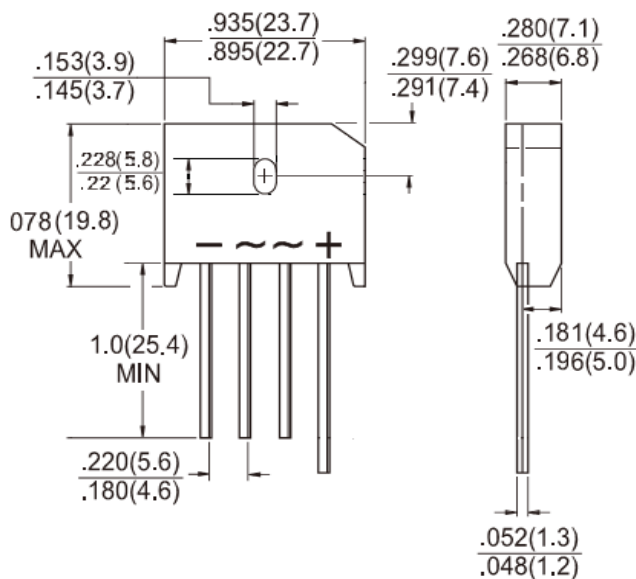




**KBU601G - KBU607G**  
Single Phase 6.0AMPS. Glass Passivated Bridge Rectifiers

**KBU**



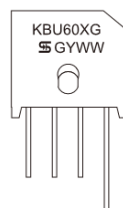
**Features**

- ◇ UL Recognized File #E-326243
- ◇ Glass passivated junction
- ◇ Ideal for printed circuit board
- ◇ High case dielectric strength
- ◇ Plastic material has Underwriters Laboratory flammability Classification 94V-0
- ◇ Typical IR less than 0.1uA
- ◇ 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: Molded plastic body
- ◇ Terminals: Pure tin plated, lead free, solderable per MIL-STD-202, Method 208
- ◇ Weight: 7.2 grams
- ◇ Mounting Torque: 5 in lbs max.

**Dimensions in inches and (millimeters)**



**Marking Diagram**

- KBU60XG = 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	KBU 601G	KBU 602G	KBU 603G	KBU 604G	KBU 605G	KBU 606G	KBU 607G	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 @ $T_A=65^\circ C$	$I_{F(AV)}$	6							A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	$I_{FSM}$	175							A
Rating of fusing (t<8.3mS)	$I^2t$	127							A <sup>2</sup> S
Maximum Instantaneous Forward Voltage (Note 1) @ 3 A @ 6 A	$V_F$	1.0 1.1							V
Maximum DC Reverse Current @ $T_A=25^\circ C$ at Rated DC Blocking Voltage @ $T_A=125^\circ C$	$I_R$	5.0 500							uA
Typical Junction Capacitance per leg (Note 2)	$C_j$	400							pF
Typical Thermal Resistance	$R_{\theta JA}$ $R_{\theta JC}$	8.6 3.1							°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=300u sec, 1% Duty Cycle

Note 2 : Measured at 1MHz and applied Reverse Voltage of 4.0V D.C.

## RATINGS AND CHARACTERISTIC CURVES (KBU601G THRU KBU607G)

FIG.1 MAXIMUM DERATING CURVE FOR OUTPUT CURRENT

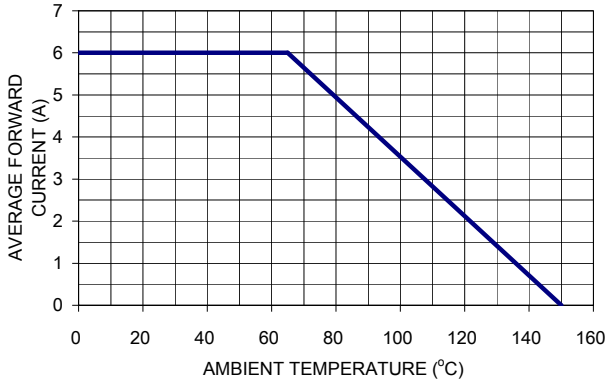


FIG. 2 MAXIMUM FORWARD SURGE CURRENT PER LEG

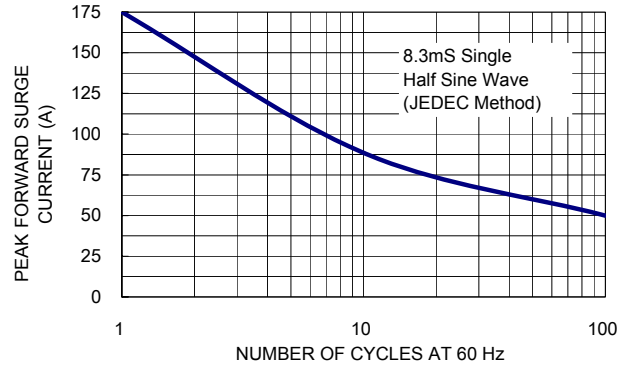


FIG. 3 TYPICAL REVERSE CHARACTERISTICS PER LEG

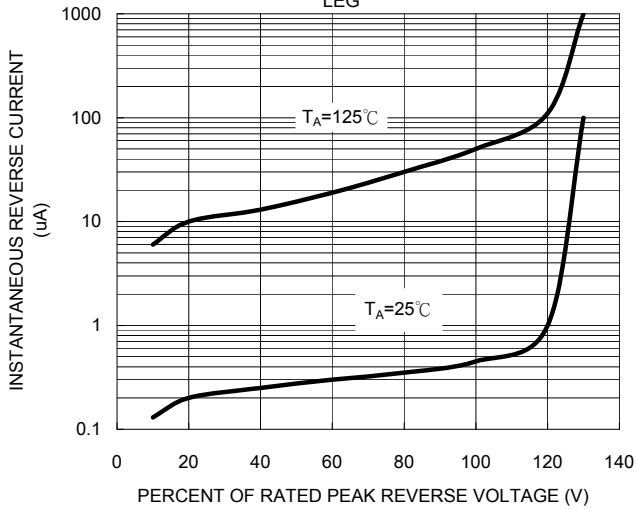


FIG. 4 TYPICAL FORWARD CHARACTERISTICS PER LEG

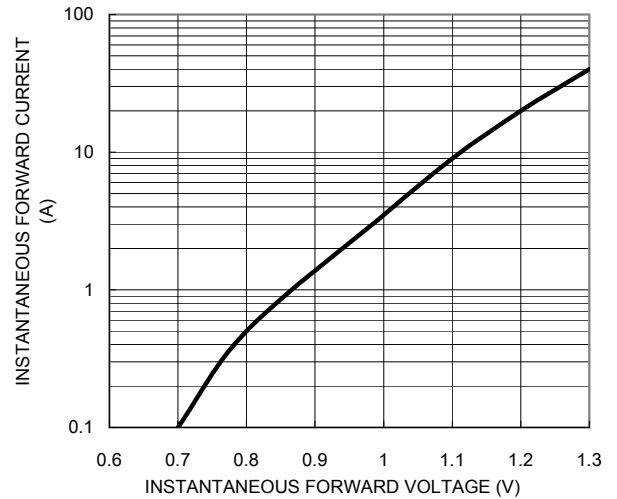


FIG. 5 TYPICAL JUNCTION CAPACITANCE

