



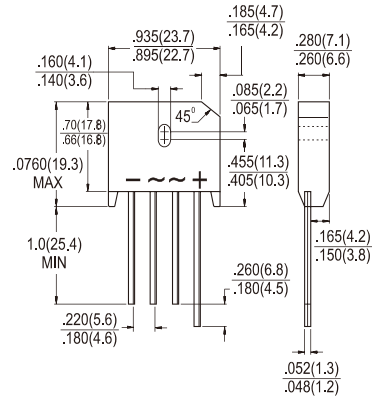
# KBU401G - KBU407G

Single Phase 4.0 AMPS.  
Glass Passivated Bridge Rectifiers

## KBU

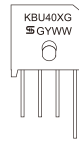
### Features

- ◇ 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., ( 2.3 kg ) tension
- ◇ Green compound with suffix "G" on packing code & prefix "G" on datecode.



Dimensions in inches and (millimeters)

### Marking Diagram



KBU40XG = Specific Device Code  
 G = Green Compound  
 Y = Year  
 WW = Work Week

### Mechanical Data

- ◇ Case : Molded plastic body
- ◇ Terminal :Pure tin plated , Lead free. Leads solderable per MIL-STD-202 Method 208
- ◇ Weight : 8.0 grams
- ◇ Mounting Torque : 5 in lbs max.

### 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 401G	KBU 402G	KBU 403G	KBU 404G	KBU 405G	KBU 406G	KBU 407G	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 @ $T_A = 65^\circ\text{C}$	$I_{F(AV)}$	4.0							A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method )	$I_{FSM}$	150							A
Rating of fusing ( $t < 8.3\text{ms}$ )	$I^2t$	93.0							$\text{A}^2\text{S}$
Maximum Instantaneous Forward Voltage @ 2.0A @ 4.0A	$V_F$	1.0 1.1							V
Maximum DC Reverse Current @ $T_A=25^\circ\text{C}$ at Rated DC Blocking Voltage (Note 1) @ $T_A=125^\circ\text{C}$	$I_R$	5.0 500							$\mu\text{A}$
Typical Junction Capacitance per leg (Note 3)	$C_j$	240							pF
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$ $R_{\theta JC}$	19 4.0							$^\circ\text{C/W}$
Operating Temperature Range	$T_J$	-55 to +150							$^\circ\text{C}$
Storage Temperature Range	$T_{STG}$	-55 to +150							$^\circ\text{C}$

Note : 1. Pulse Test with PW=300 usec, 1% Duty Cycle  
 2. Unit case mounted on 2" x 3" x 0.25" Al plate heat sink.  
 3. Measured at 1MHz and applied Reverse bias of 4.0V DC.

## RATINGS AND CHARACTERISTIC CURVES (KBU401G THRU KBU407G)

FIG 1 Maximum Derating Curve for Output Current

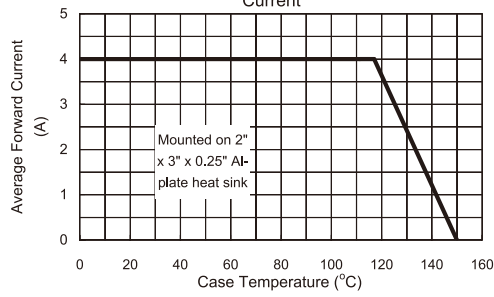


FIG 2 Maximum Forward Surge Current per Leg

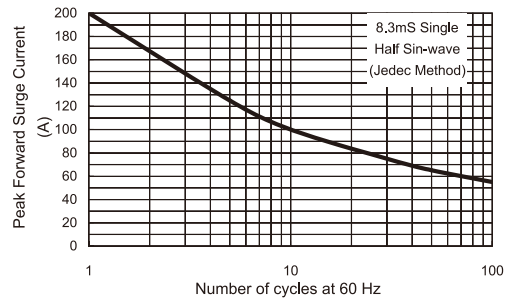


FIG 3 Typical Reverse Characteristics per Leg

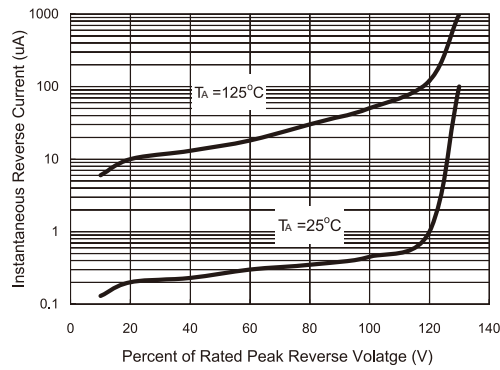


FIG 4 Typical Forward Characteristics per Leg.

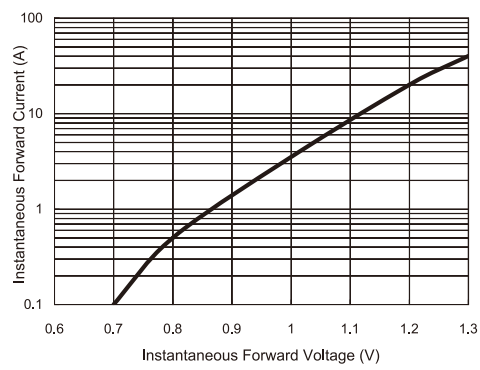


FIG 5 Typical Junction Capacitance

