



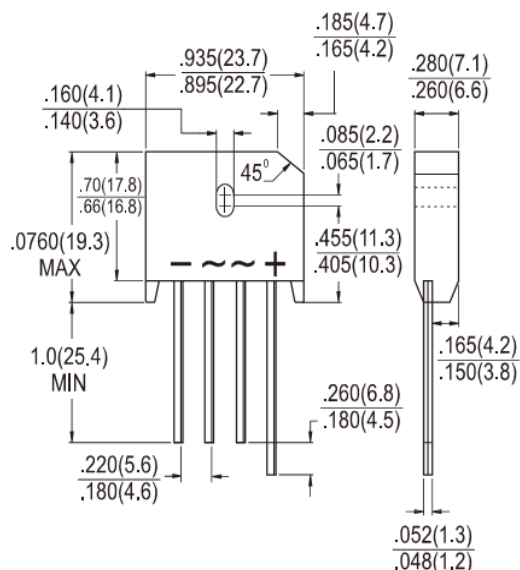
# KBU401 - KBU407

Single Phase 4.0AMPS. Bridge Rectifiers

## KBU

### Features

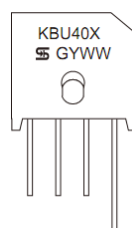
- ✦ UL Recognized File #E-326243
- ✦ Ideal for printed circuit board
- ✦ High case dielectric board
- ✦ Plastic material used carries Underwriters Laboratory Classification 94V-0
- ✦ Typical IR less than 0.1uA
- ✦ High surge current capability
- ✦ High temperature soldering guaranteed: 260°C/10 seconds 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: 8.0 grams
- ✦ Mounting Torque: 5 in lbs max.

### Dimensions in inches and (millimeters)



### Marking Diagram

- KBU40X = 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 401	KBU 402	KBU 403	KBU 404	KBU 405	KBU 406	KBU 407	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 @ $T_A=65^\circ C$	$I_{F(AV)}$	4							A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	$I_{FSM}$	200							A
Rating of fusing (t<8.3mS)	$I^2t$	166							A <sup>2</sup> S
Maximum Instantaneous Forward Voltage (Note 1) @ 2 A @ 4 A	$V_F$	1.0 1.1							V
Maximum DC Reverse Current @ $T_A=25^\circ C$ at Rated DC Block Voltage @ $T_A=125^\circ C$	$I_R$	5.0 500							uA
Typical Junction Capacitance per leg (Note 2)	Cj	240							pF
Typical Thermal Resistance (Note 3)	$R_{\theta JA}$ $R_{\theta JC}$	19 4.0							°C/W
Operating Temperature Range	$T_J$	- 55 to + 125							°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.

Note 3 : Mounted on 2" x 3" x 0.25" Al plate heat sink.

## RATINGS AND CHARACTERISTIC CURVES (KBU401 THRU KBU407)

FIG.1 MAXIMUM DERATING CURVE FOR OUTPUT CURRENT

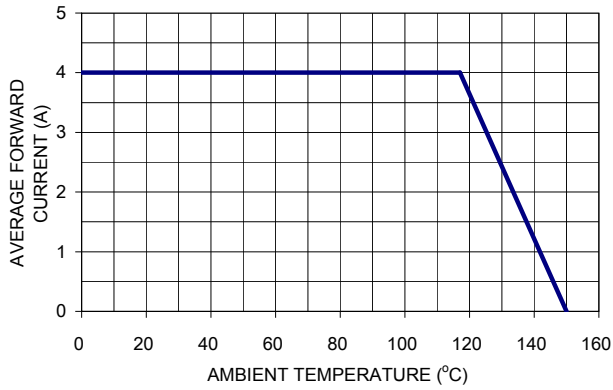


FIG. 2 MAXIMUM FORWARD SURGE CURRENT PER LEG

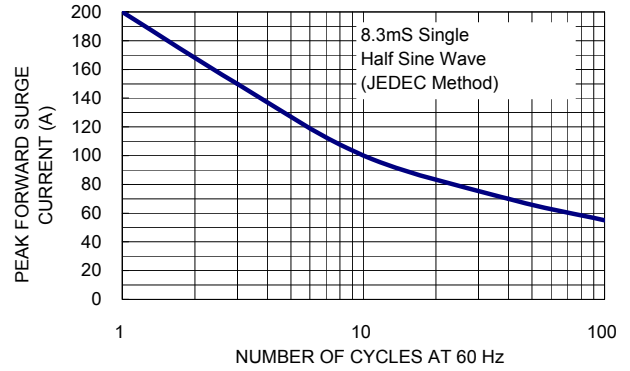


FIG. 3 TYPICAL REVERSE LEAKAGE CHARACTERISTICS PER LEG

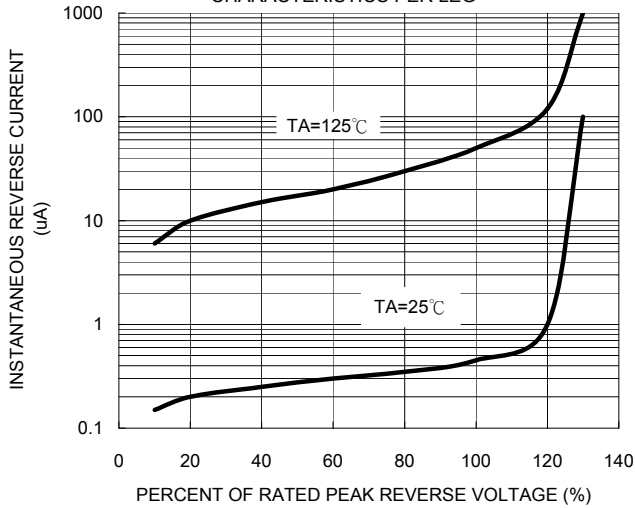


FIG. 4 TYPICAL FORWARD CHARACTERISTICS PER LEG

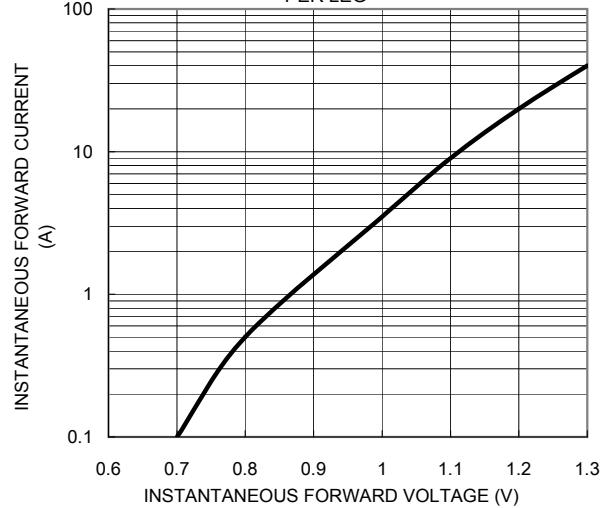


FIG. 5 TYPICAL JUNCTION CAPACITANCE

