

KBU401 - KBU407

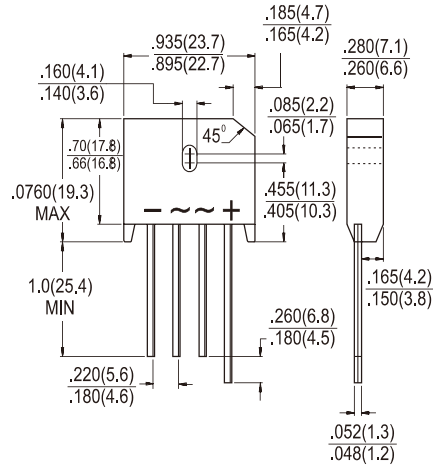
Single Phase 4.0 AMPS. Bridge Rectifiers

KBU



Features

- ✧ UL Recognized File # E-326243
- ✧ 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.

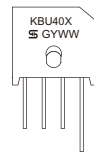


Mechanical Data

- ✧ 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.

Dimension in inches and (millimeter)

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 @ $T_A = 65^\circ\text{C}$	$I_{F(AV)}$	4.0							A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	200							A
Rating of fusing ($t < 8.3\text{ms}$)	i^2t	166							A ² 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 @ $T_A=125^\circ\text{C}$ (Note 1)	I_R	5.0 500							uA
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							$^\circ\text{C}/\text{W}$
Operating Temperature Range	T_J	-55 to +125							$^\circ\text{C}$
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 (KBU401 THRU KBU407)

FIG 1 Maximum Derating Curve for Output Current

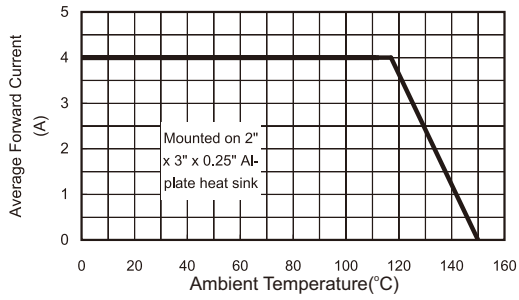


FIG 2 Maximum Forward Surge Current per Leg

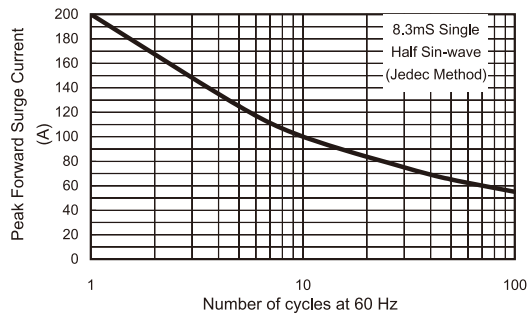


FIG 3 Typical Reverse Leakage Characteristics per Leg

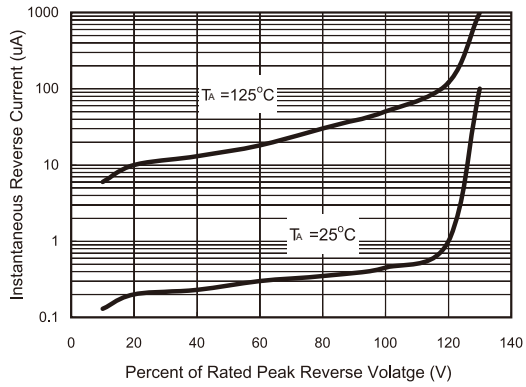


FIG 4 Typical Forward Characteristics per Leg

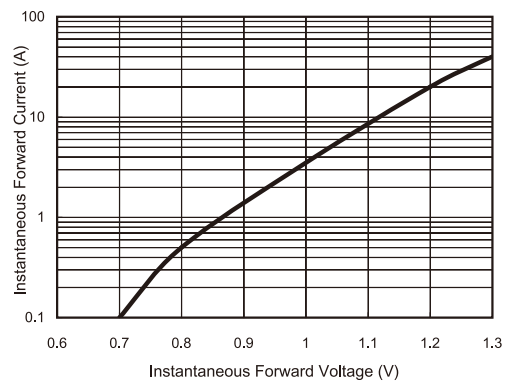


FIG 5 Typical Junction Capacitance

