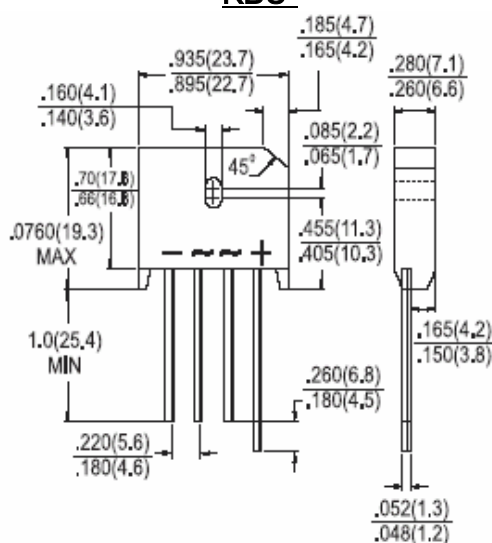



RoHS
COMPLIANCE


KBU1001 - KBU1007

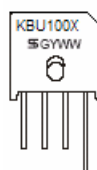
Single Phase 10.0 AMPS. Bridge Rectifiers

KBU



Dimension in inches and (millimeter)

Marking Diagram



KBU100X = Specific Device Code
G = Green Compound
Y = Year
WW = Work Week

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 (0.3 ounce)
- ✧ 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 1001	KBU 1002	KBU 1003	KBU 1004	KBU 1005	KBU 1006	KBU 1007	Units
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	1000	1000	V
Maximum RMS Voltage	V_{RMS}	35	70	140	2100	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	1000	1000	V
Maximum Average Forward Rectified Current @ $T_A = 65^\circ\text{C}$	$I_{(AV)}$	10.0							A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	300							A
Rating of fusing ($t < 8.3\text{ms}$)	I^2t	373.0							A ² S
Maximum Instantaneous Forward Voltage @ 5.0A @ 10.0A	V_F	1.0 1.1							V
Maximum DC Reverse Current @ $T_A=25^\circ\text{C}$ at Rated DC Blocking Voltage @ $T_A=125^\circ\text{C}$	I_R	10.0 500							uA
Typical Junction Capacitance per leg (Note 1)	C_j	400							pF
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$ $R_{\theta JC}$	25 2.2							oC/W
Operating Temperature Range	T_J	-55 to +125							°C
Storage Temperature Range	T_{STG}	-55 to +150							°C

Note 1 : Measured at 1MHz and applied Reverse bias of 4.0V DC.

2. Unit case mounted on 4" x 6" x 0.25" Al plate heat sink.

Rating and Sharacteristic Curves (KBU1001 - KBU1007)

FIG 1 Maximum Derating Curve for Output

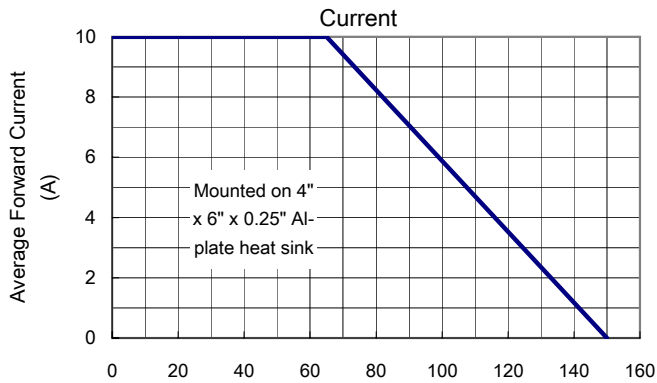


FIG 2 Maximum Forward Surge Current per Leg

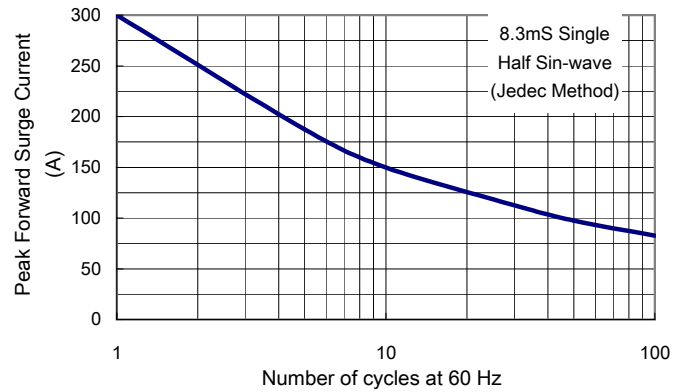


FIG 3 Typical Reverse Characteristics per Leg

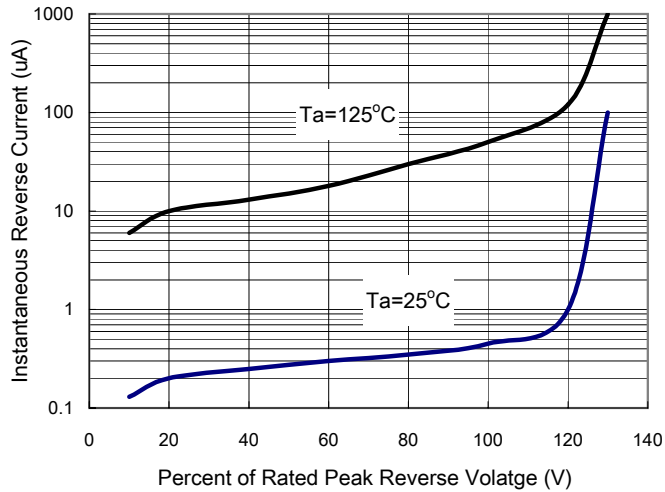


FIG 4 Typical Forward Characteristics per Leg.

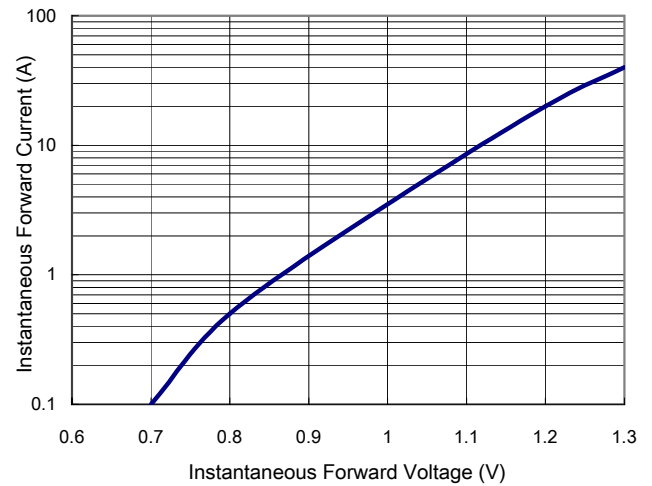


FIG 5 Typical Junction Capacitance

