



KBU801 THRU KBU807

Single Phase 8.0 AMPS. Silicon Bridge Rectifiers

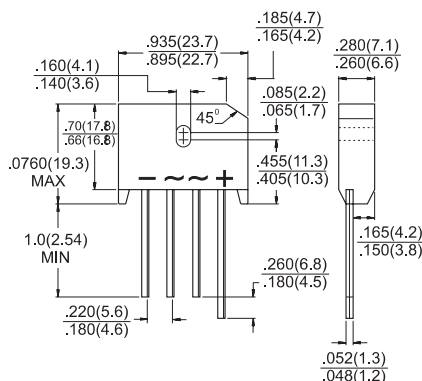


Voltage Range
50 to 1000 Volts
Current
8.0 Amperes

KBU

Features

- ✧ UL Recognized File # E-96005
- ✧ High surge current capability
- ✧ Ideal for printed circuit board
- ✧ Reliable low cost construction technique results in inexpensive product
- ✧ High temperature soldering guaranteed:
260°C / 10 seconds / 0.375" (9.5mm)
lead length at 5 lbs., (2.3 kg) tension
- ✧ Weight: 8 grams



Dimensions in inches and (millimeters)

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 801	KBU 802	KBU 803	KBU 804	KBU 805	KBU 806	KBU 807	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 @ $T_A = 65^\circ\text{C}$	$I_{(AV)}$	8.0							A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	300							A
Maximum Instantaneous Forward Voltage @ 8.0A	V_F	1.1							V
Maximum DC Reverse Current @ $T_A=25^\circ\text{C}$ at Rated DC Blocking Voltage @ $T_A=100^\circ\text{C}$	I_R	10 500							μA μA
Typical Thermal resistance (Note 1) (Note 2)	$R_{\theta JA}$ $R_{\theta JC}$	18 3.0							$^\circ\text{C}/\text{W}$
Operating Temperature Range	T_J	-55 to +125							$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-55 to +150							$^\circ\text{C}$

Note: 1. Thermal Resistance from Junction to Ambient with units in Free Air, no Heatsink, P.C.B.

Mounted on 0.5 x 0.5" (12 x 12mm) Copper Pads, 0.375" (9.5mm) Lead Length.

2. Thermal Resistance from Junction to Case with units Mounted on a 3.0 x 3.0" x 0.11" thick
(7.5 x 7.5 x 0.3cm) Al. Plate Heatsink.

RATINGS AND CHARACTERISTIC CURVES (KBU801 THRU KBU807)

FIG.1- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER BRIDGE ELEMENT

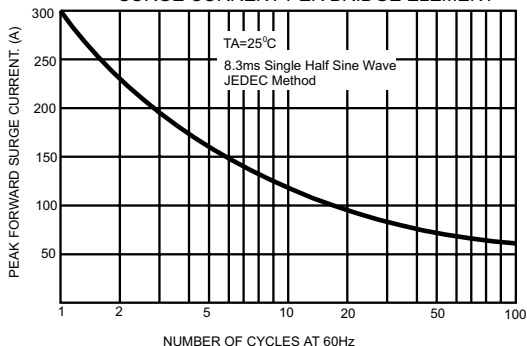


FIG.2- MAXIMUM FORWARD CURRENT DERATING CURVE

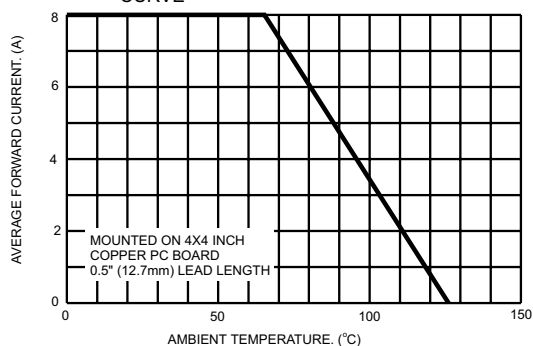


FIG.3- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER BRIDGE ELEMENT

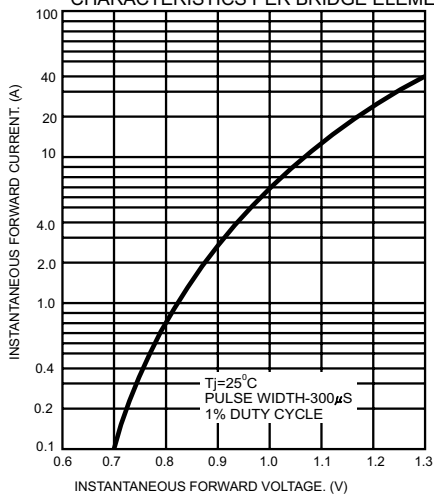


FIG.4- TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT

