TSC 9b

KBU801 THRU KBU807

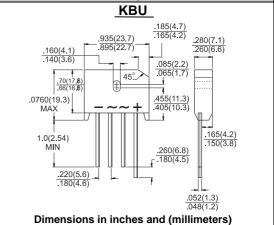
Single Phase 8.0 AMPS. Silicon Bridge Rectifiers



Voltage Range 50 to 1000 Volts Current 8.0 Amperes

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



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	KBU	KBU	KBU	KBU	KBU	Units
		801	802	803	804	805	806	807	
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 _(AV)	8.0							Α
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I _{FSM}	300							Α
Maximum Instantaneous Forward Voltage @ 8.0A	V _F	1.1							>
Maximum DC Reverse Current @ T _A =25°C	_	10							uA
at Rated DC Blocking Voltage @ T _A =100°C	I _R 500							uА	
Typical Thermal Resistance (Note 1)	$R\theta_{JA}$	18							℃/W
(Note 2)	$R\theta_{JC}$	3.0							
Operating Temperature Range	T_J	-55 to +125							${\mathbb C}$
Storage Temperature Range	T _{STG}	-55 to +150							${\mathbb C}$

Note: 1. Thermal Resistance from Junction to Ambient and Junction to Case with units Mounted on 2" x 3" x 0.25" Al-Plate.



RATINGS AND CHARACTERISTIC CURVES (KBU801 THRU KBU807)

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

300

TA=25°C

150

150

150

150

NUMBER OF CYCLES AT 60Hz

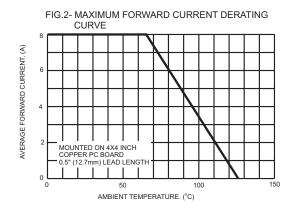


FIG.3- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER BRIDGE ELEMENT 100 INSTANTANEOUS FORWARD CURRENT. (A) 20 4.0 2.0 1.0 Tj=25°C PULSE WIDTH-300µS 1% DUTY CYCLE 0.2 0.1 1.0 1.2 0.6 0.8 0.9 1.3 INSTANTANEOUS FORWARD VOLTAGE. (V)

