

KBU10M

10 A Single-Phase Silicon Bridge Rectifier Rectifier Reverse Voltage 50 to 1000V

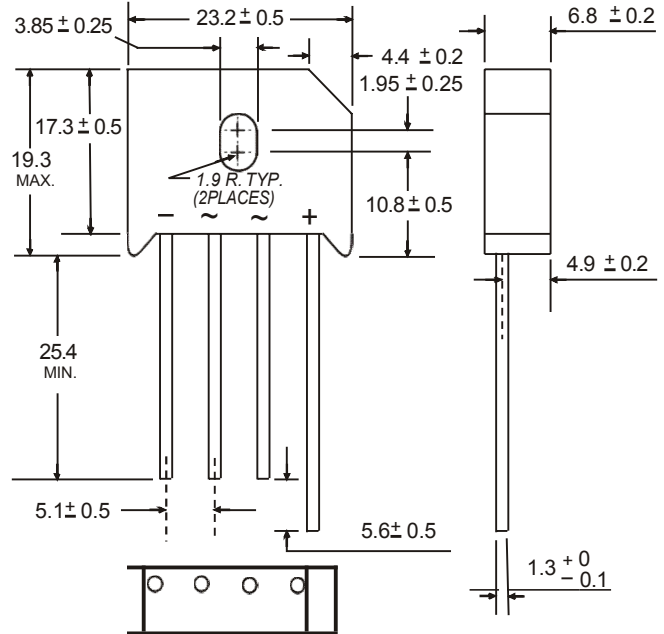


Features

- Ideal for P.C. Board mounting
- High surge current capability
- This series is UL listed under the Recognized Component Index, file number E142814
- The plastic material used carries Underwriters Laboratory flammability recognition 94V-0
- High temperature soldering guaranteed 265 °C / 10 seconds at 5 lbs (2.3kg) tension

Mechanical Data

Case: Molded plastic body
 Terminals: Plated leads solderable per MIL-STD-202, Method 208
 Polarity: Polarity symbols molded on body
 Mounting Position: Any
 Mounting Torque: 5 in-lbs max.
 Weight: 0.3 ounce, 8.0 grams (approx)



Maximum Ratings & Thermal Characteristics

Rating at 25 °C ambient temperature unless otherwise specified, Resistive or Inductive load, 60 Hz.
 For Capacitive load derate current by 20%.

Parameter	Symbol	KBU 10M	unit
Maximum repetitive peak reverse voltage	VRRM	1000	V
Maximum RMS bridge input voltage	VRMS	700	V
Maximum DC blocking voltage	VDC	1000	V
Maximum average forward rectified output current at TA=100 °C	IF(AV)	10	A
Peak forward surge current single sine-wave superimposed on rated load (JEDEC Method)	IFSM	300	A
Rating for fusing (t < 8.3ms)	I ² t	300	A ² sec
Typical thermal resistance per element (1)	ReJA	2.7	°C / W
Operating junction and storage temperature range	TJ, TSTG	-55 to + 150	°C

Electrical Characteristics

Rating at 25 °C ambient temperature unless otherwise specified. Resistive or Inductive load, 60Hz.
 For Capacitive load derate by 20 %.

Parameter	Symbol	KBU 10M	Unit
Maximum instantaneous forward voltage drop per leg at 10A	VF	1.05	V
Maximum DC reverse current at rated TA = 25 °C DC blocking voltage per element TA = 125 °C	IR	10 500	μA

Notes: (1) Thermal resistance from Junction to Ambient on P.C.board mounting.

Rating and Characteristic Curves ($T_A = 25^\circ\text{C}$ Unless otherwise noted)

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Fig. 1 Derating Curve for Output Rectified Current

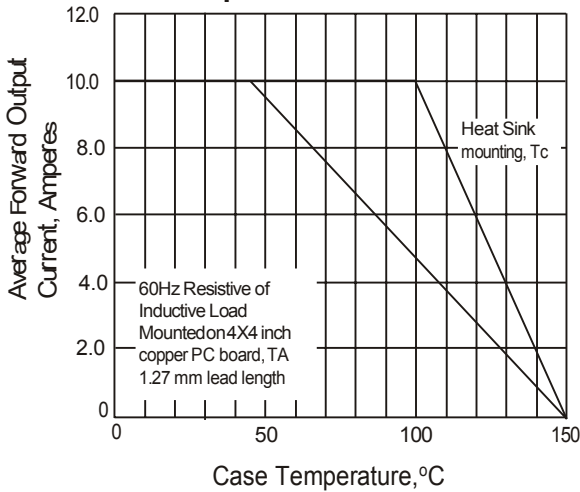


Fig. 2 Maximum Non-repetitive Peak Forward Surge Current

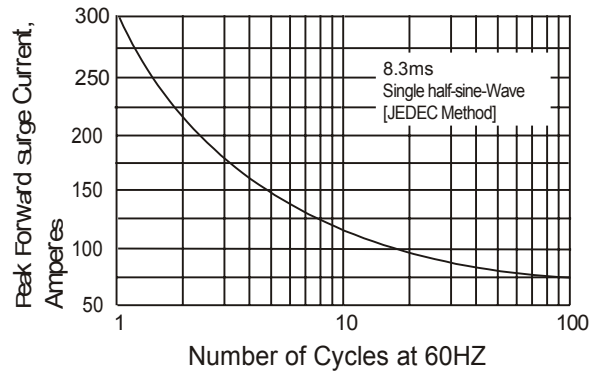


Fig. 3 Typical Instantaneous Forward Characteristics

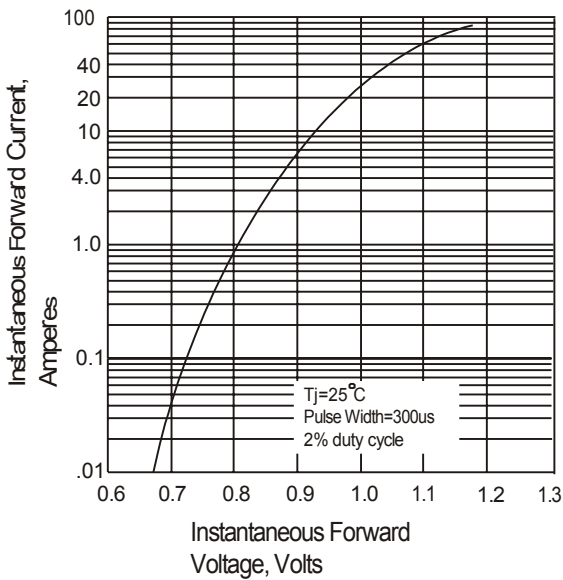


Fig. 4 Typical Reverse Characteristics

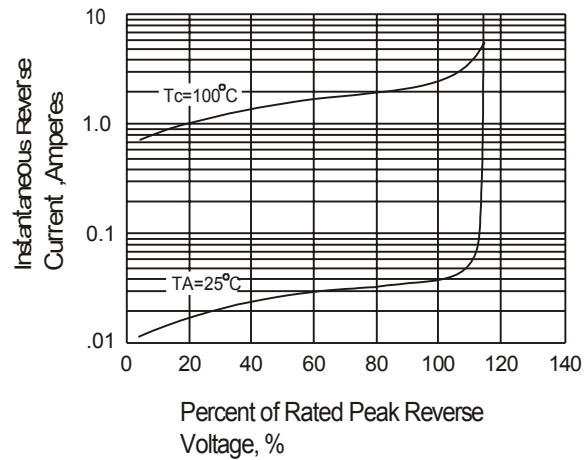


Fig. 5 Typical Junction Capacitance

