



SINGLE PHASE GLASS PASSIVATED BRIDGE RECTIFIER

KBU6A - KBU6M

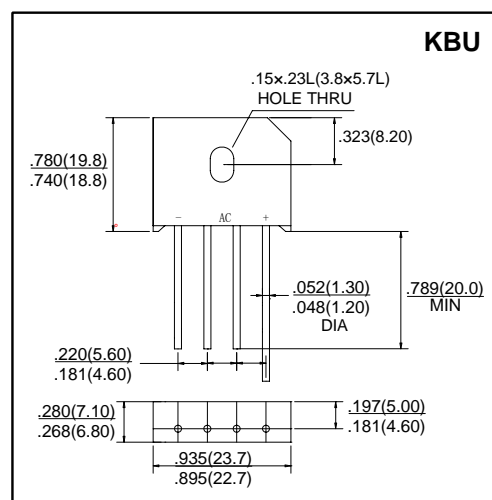
VOLTAGE RANGE - 50 to 1000 V
CURRENT - 6 A

FEATURES

- Glass Passivated Chip
- High forward surge current capability
Ideal for printed circuit board
- High temperature soldering guaranteed: 260 °C/10 second,
- 0.375" (9.5mm) lead length at 5 lbs. (2.3kg) tension.

MECHANICAL DATA

- Case: Transfer molded plastic
- Terminal: Lead solderable per MIL-STD-202E method 208C
- Polarity: Polarity symbols marked on case
- Mounting: Thru hole for #6 screw, 5 in.-lbs torque max
- Weight: 0.27 ounce, 7.59 gram



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified. Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load derate current by 20%.

	SYMBOLS	KBU6A	KBU6B	KBU6D	KBU6G	KBU6J	KBU6K	KBU6M	UNITS
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified Output Current, at	$T_C=115^\circ\text{C}$ (Note 2)	6.0						Amps	
	$T_A=25^\circ\text{C}$ (Note 3)								2.5
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	135						Amps	
Rating for Fusing ($t < 8.3\text{ms}$)	I^2t	75						A^2s	
Maximum Instantaneous Forward Voltage Drop per bridge element at 6.0A	V_F	1.1						Volts	
Maximum DC Reverse Current at rated DC blocking voltage per element	$T_A=25^\circ\text{C}$	5						μAmps	
	$T_A=100^\circ\text{C}$	0.5						mAmps	
Typical Junction Capacitance (Note 1)	C_J	200						pF	
Typical Thermal Resistance (Note 2)	$R_{\theta JC}$	5						$^\circ\text{C}/\text{W}$	
Operating and Storage Temperature Range	T_J, T_{STG}	-55 to +150						$^\circ\text{C}$	

NOTES:

1. Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts.
2. Unit mounted on 2.6"x1.4"x0.06" thick (6.3x3.5x0.15cm) Al. plate.
3. Unit mounted in free air, no heatsink, P.C.B at 0.375" (9.5mm) lead length with 0.5"x0.5" (12x12cm) copper pads

RATING AND CHARACTERISTIC CURVES KBU6A - KBU6M

