



SINGLE-PHASE BRIDGE RECTIFIER

KBU6A THRU KBU6M

VOLTAGE RANGE
CURRENT

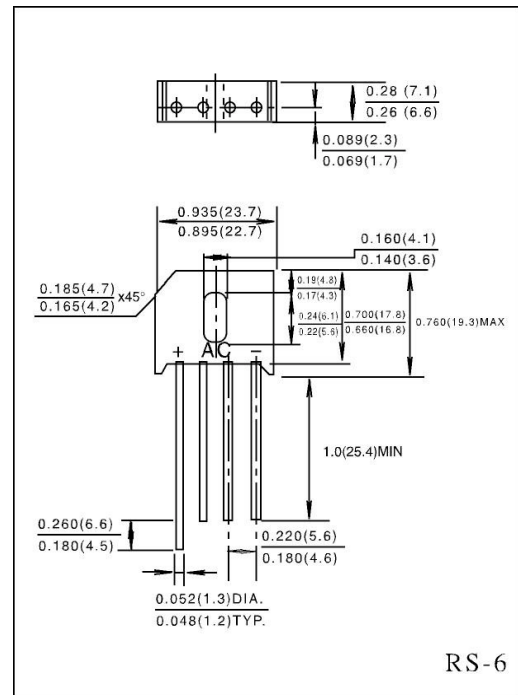
50 to 1000 Volts
6.0 Ampere

FEATURES

- Low cost
- This series is UL recognized under component index, file number E127707
- 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	UNIT	
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	$T_C = 100^\circ C$	$I_{(AV)}$	6.0							Amps	
	$T_A = 40^\circ C$ (Note3)		6.0								
Peak Forward Surge Current 8.3ms single half sine - wave superimposed on rated load (JEDEC method)		I_{FSM}	250								Amps
Rating for Fusing ($t < 8.3ms$)		I^2t	260								A^2s
Maximum Instantaneous Forward Voltage Drop per bridge element at 6.0A		V_F	1.0								Volts
Maximum DC Reverse Current at rated DC blocking voltage per element	$T_A = 25^\circ C$	I_R	10								μA
	$T_A = 100^\circ C$		1.0								mA
Typical Junction Capacitance (Note 1)		C_j	200								pF
Typical Thermal Resistance (Note 2)		$R_{\theta JC}$	4.7								$^\circ C/W$
Operating Temperature Range		T_J	(-65 to +150)								$^\circ C$
Storage Temperature Range		T_{STG}	(-65 to +150)								

NOTES:

1. Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts.
2. Unit mounted on 2.6" X 1.4" X 0.06" thick (6.3 X 3.5 X 0.15cm) Al. plate.
3. Unit mounted in free air, no heatsink, P.C.B. at 375" (9.5mm) lead length with 5" X 5" (12 X 12mm) copper pads.

RATINGS AND CHARACTERISTIC CURVES KBU6A THRU KBU6M

FIG.1-DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

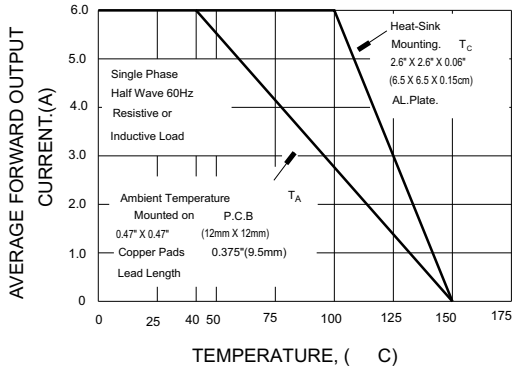


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER ELEMENT

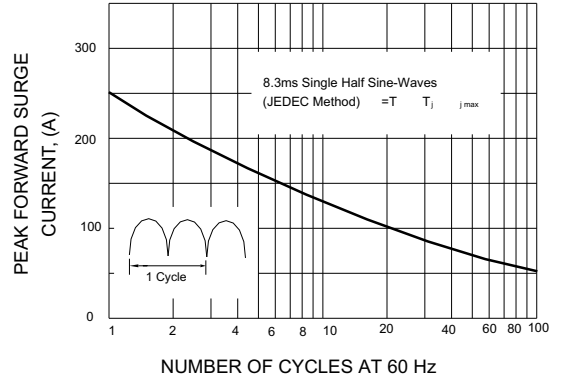


FIG.3-TYPICAL FORWARD CHARACTERISTICS PER BRIDGE ELEMENT

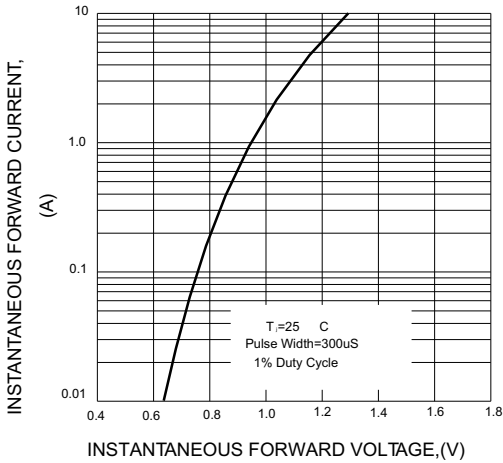


FIG.4-TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT

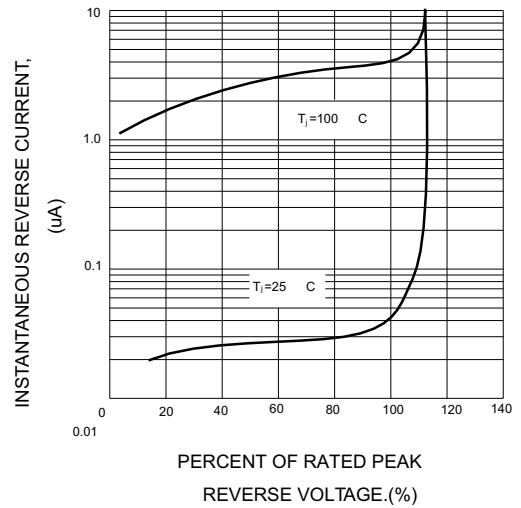


FIG.5-TYPICAL JUNCTION CAPACITANCE PER BRIDGE ELEMENT

