



MASTER INSTRUMENT CORPORATION

SINGLE-PHASE BRIDGE RECTIFIER KBU8A THRU KBU8M

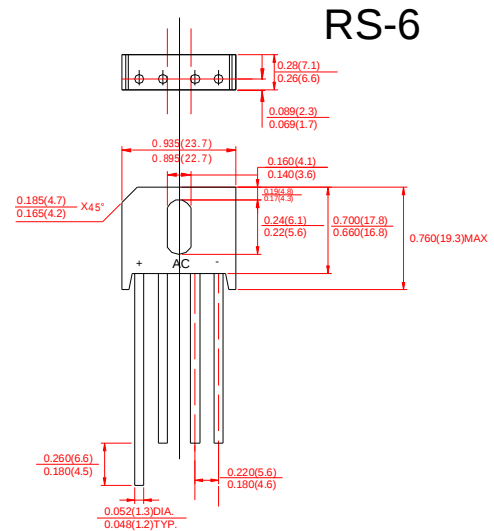
VOLTAGE RANGE 50 to 1000 Volts
CURRENT 8.0 Amperes

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



Dimensions in inches and (millimeters)

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	KBU8A	KBU8B	KBU8D	KBU8G	KBU8J	KBU8K	KBU8M	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 =100°C (Note 2)	I _(AV)	8.0						Amps	
	T _A =45°C (Note 3)		6.0							
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)		I _{FSM}	300						Amps	
Rating for Fusing (t<8.3ms)		I ² t	373						A ² s	
Maximum Instantaneous Forward Voltage Drop per bridge element at 8.0A		V _F	1.0						Volts	
Maximum DC Reverse Current at rated DC blocking voltage per element	T _A =25°C	I _R	5.0						μAmps	
	T _A =100°C		1.0						mAmps	
Typical Junction Capacitance (Note 1)		C _J	200						pF	
Typical Thermal Resistance (Note 2)		R _{θJC}	5.0						°C/W	
Operating and Storage Temperature Range		T _J , T _{STG}	-55 to +150						°C	

NOTES:

1. Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts.
2. Unit mounted on 3.0"x3.0"x0.11" thick (7.5x7.5x0.3cm) 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



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RATINGS AND CHARACTERISTIC CURVES KBU8A THRU KBU8M

FIG.1-DERATING CURVE FOR
OUTPUT RECTIFIED CURRENT

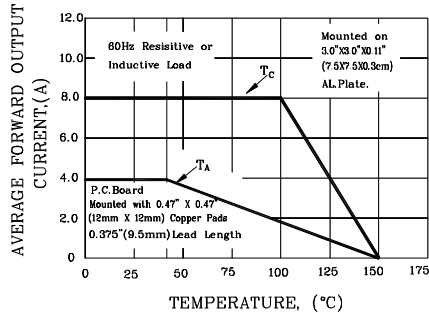


FIG.2-MAXIMUM NON-REPETITIVE PEAK
FORWARD SURGE CURRENT PER ELEMENT

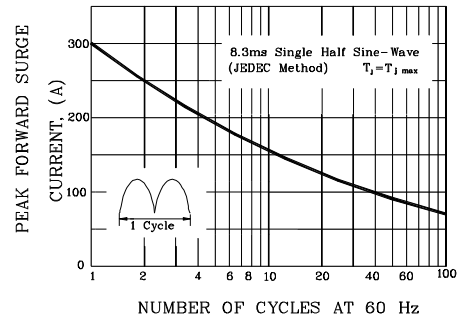


FIG.3-TYPICAL FORWARD CHARACTERISTICS
PER BRIDGE ELEMENT

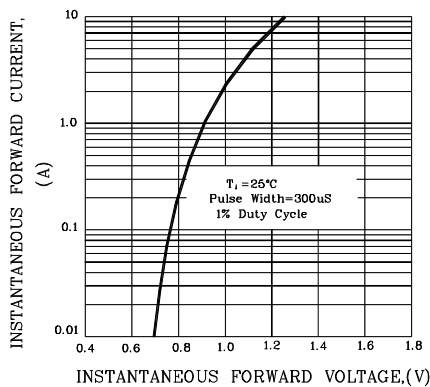


FIG.4-TYPICAL REVERSE CHARACTERISTICS
PER BRIDGE ELEMENT

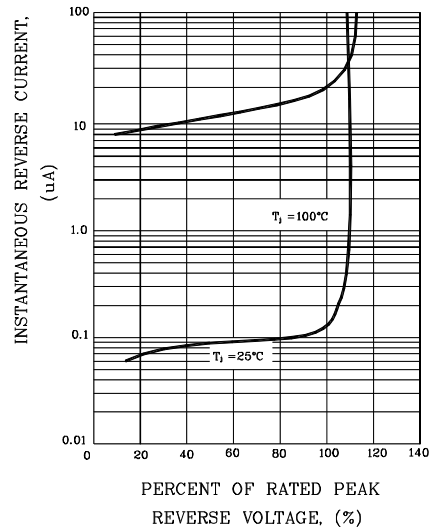


FIG.5-TYPICAL JUNCTION CAPACITANCE
PER BRIDGE ELEMENT

