



SINGLE PHASE BRIDGE RECTIFIER

KBU6A THRU KBU6M

VOLTAGE RANGE
CURRENT

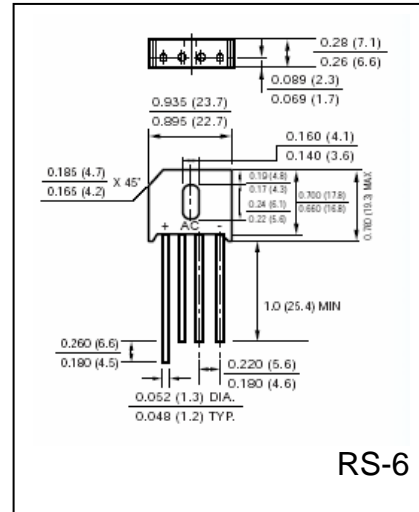
50 to 1000 Volts
6.0 Ampere

FEATURES

- UL recognized
- High forward surge current capability
- High temperature soldering guaranteed:
260°C / 10 seconds

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 Current,	At $T_C = 100^\circ\text{C}$ (Note 1)	6.0							Amps
	At $T_A = 40^\circ\text{C}$ (Note 2)	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 ($t < 8.3\text{mS}$)	I^2t	260							A^2s
Maximum Instantaneous Forward Voltage drop per Bridge element 6.0A	V_F	1.0							Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage per element	I_R	$T_A = 25^\circ\text{C}$							μA
		$T_A = 100^\circ\text{C}$							mA
Typical Junction Capacitance (Measured at 1.0MHz and applied reverse voltage of 4.0V)	C_J	200							pF
Typical Thermal Resistance (Note 1)	$R_{\theta Jc}$	4.7							$^\circ\text{C}/\text{W}$
Operating Junction Temperature Range	T_J	(-65 to +150)							$^\circ\text{C}$
Storage Temperature Range	T_{STG}	(-65 to +150)							$^\circ\text{C}$

Notes:

1. Unit mounted on 3.0" x 3.0" x 0.11" (7.5cm x 7.5cm x 0.3cm) AL plate,
2. Unit mounted in free air with no heatsink, PCB at 0.375" (9.5mm) lead length with copper pads 0.5" x 0.5" (12mm x 12mm)



RATINGS AND CHARACTERISTIC CURVES KBU6A THRU KBU6M

FIG.1-DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

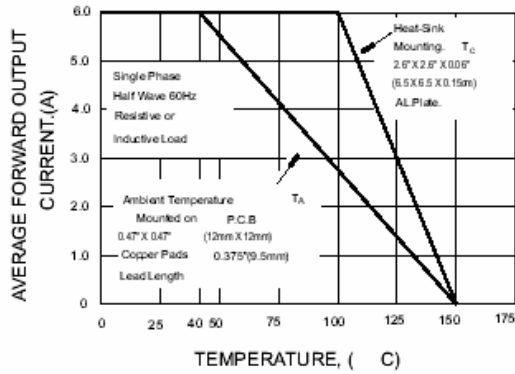


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER ELEMENT

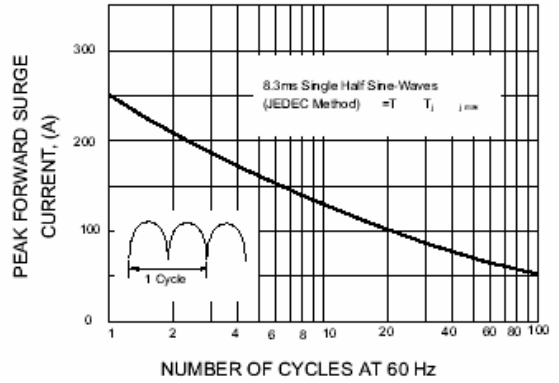


FIG.3-TYPICAL FORWARD CHARACTERISTICS PER BRIDGE ELEMENT

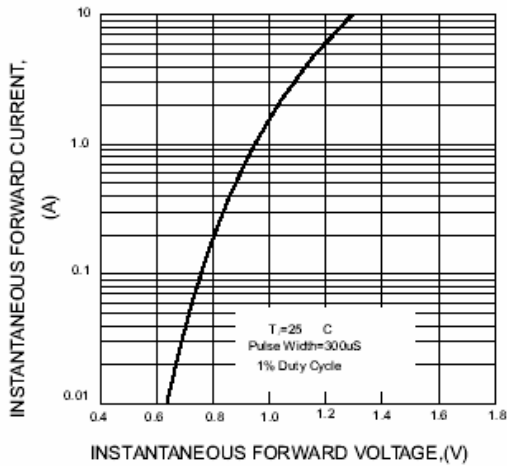


FIG.4-TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT

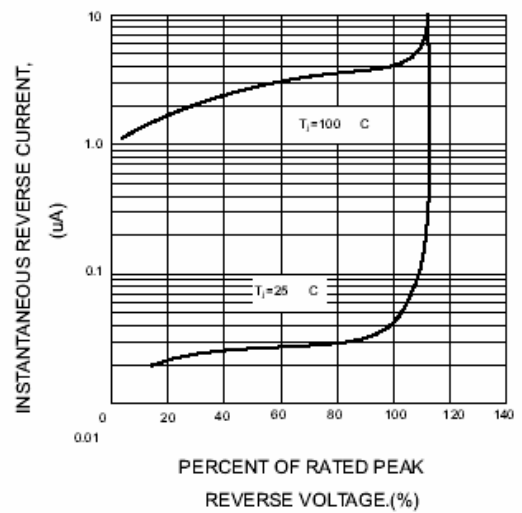


FIG.5-TYPICAL JUNCTION CAPACITANCE PER BRIDGE ELEMENT

