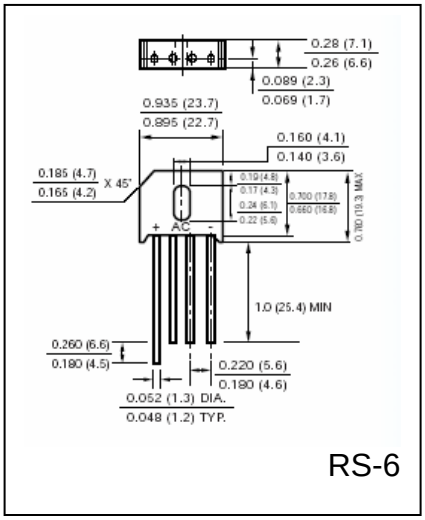
SINGLE PHASE BRIDGE RECTIFIER

KBU6A THRU KBU6M

VOLTAGE RANGE **50 to 1000 Volts**
CURRENT **6.0 Ampere**

FEATURES

- UL recognized
- High forward surge current capability
- High temperature soldering guaranteed: 260^{O}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^{O}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^{O}C (Note 1)	$I_{(AV)}$	6.0							Amps
	At TA = 40 ^{O}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<8.3mS)		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	T_A = 25 ^{O}C	I_R	10							µA
DC Blocking Voltage per element	T_A = 100 ^{O}C		1.0							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							^{O}C/W
Operating Junction Temperature Range		T_J	(-65 to +150)							^{O}C
Storage Temperature Range		T_{STG}	(-65 to +150)							^{O}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 headsind, PCB aat 0.375” (9.5mm) lead length with copper pads 0.5” x 0.5” (12mm x 12mm)

Lead Free
RoHS Compliant

RATINGS AND CHARACTERISTIC CURVES KBU6A THRU KBU6M

FIG.1-DERATING CURVE FOR
OUTPUT RECTIFIED CURRENT

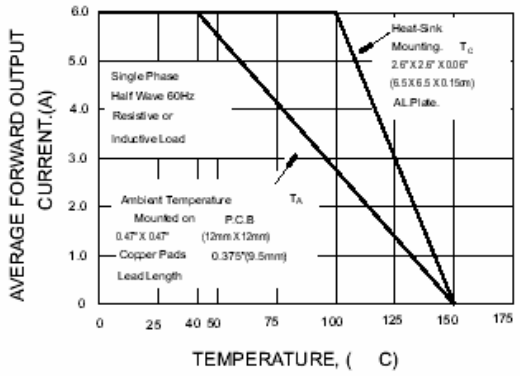


FIG.2-MAXIMUM NON-REPETITIVE PEAK
FORWARD SURGE CURRENT PER ELEMENT

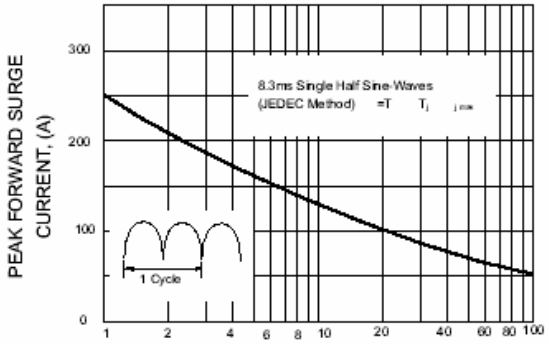


FIG.3-TYPICAL FORWARD CHARACTERISTICS
PER BRIDGE ELEMENT

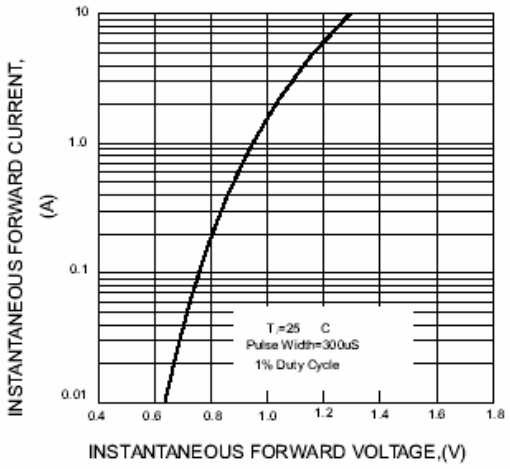


FIG.4-TYPICAL REVERSE CHARACTERISTICS
PER BRIDGE ELEMENT

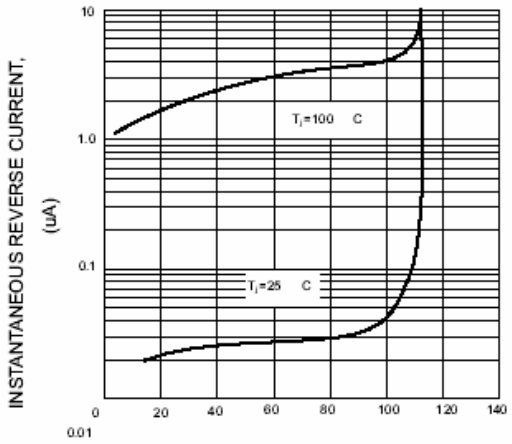


FIG.5-TYPICAL JUNCTION CAPACITANCE
PER BRIDGE ELEMENT

