

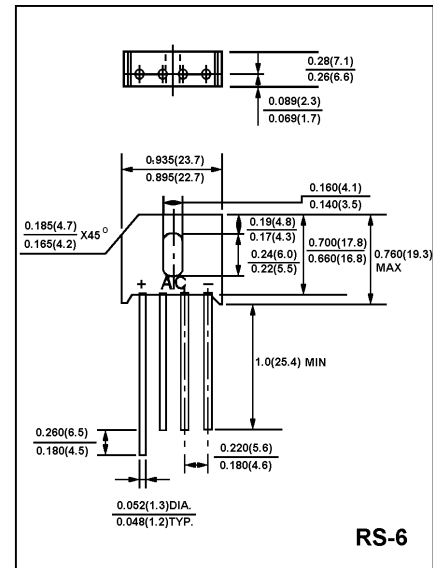
**SINGLE-PHASE BRIDGE RECTIFIER**  
**VOLTAGE RANGE 50 to 1000 Volts**  
**CURRENT 6.0 Ampere**

### FEATURES

- \* Low cost
- \* 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
- \* Epoxy: UL94V-O rate flame retardant
- \* Terminals : 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

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

Characteristic	Symbol	KBU6A	KBU6B	KBU6D	KBU6G	KBU6J	KBU6K	KBU6M	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	$V_{RRM}$ $V_{RWM}$ $V_{DC}$	50	100	200	400	600	800	1000	V
RMS Reverse Voltage	$V_{R(RMS)}$	35	70	140	280	420	560	700	V
Average Rectifier Forward Current at	$I_{O(AV)}$	6.0							A
	$T_C=100$ $T_A=40$ (Note 3)	6.0							A
Non-Repetitive Peak Surge Current 8.3 ms Single half sine-wave superimposed on rated load	$I_{FSM}$	250							A
Forward Voltage (per element) ( $I_F = 6.0$ Amp)	$V_{FM}$	1.0							V
Peak Reverse Current at rated DC blocking voltage per element	$I_R$	10							uA
	$T_A = 25$ $T_A = 100$	1.0							mA
$I^2 t$ Rating for Fusing( $t < 8.3$ ms)	$I^2 t$	260							A <sup>2</sup> s
Typical Junction Capacitance per element (Note1)	$C_J$	200							pF
Typical Thermal Resistance (per leg)(note 2)	$R_{\theta jc}$	4.7							°C/W
Operating and Storage Temperature Range	$T_J, T_{stg}$	-65 to +150							

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

# KBU6A THRU KBU6M

FIG-1 FORWARD CURRENT DERATING CURVE

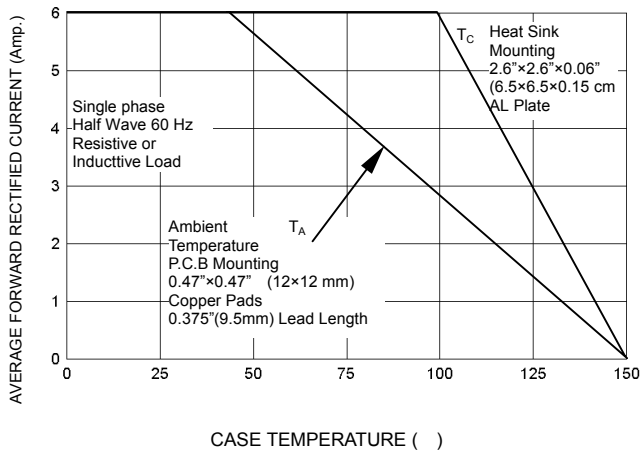


FIG-2 TYPICAL FORWARD CHARACTERISTICS

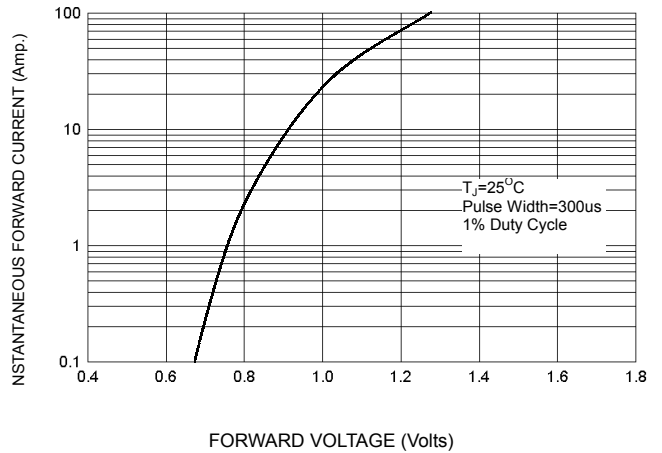


FIG-3 PEAK FORWARD SURGE CURRENT

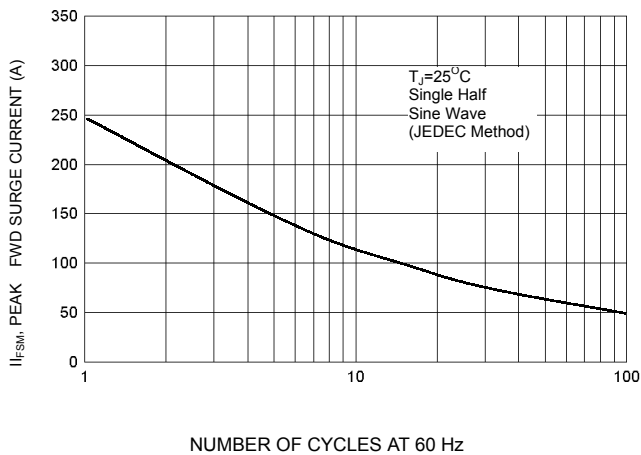


FIG-4 TYPICAL JUNCTION CAPACITANCE

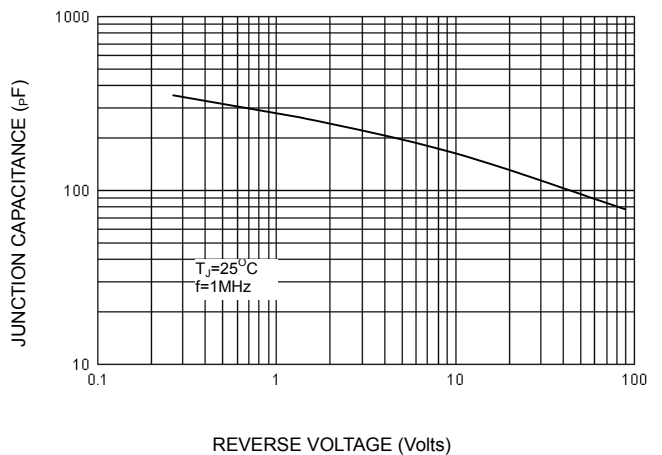


FIG-5 TYPICAL REVERSE CHARACTERISTICS

