

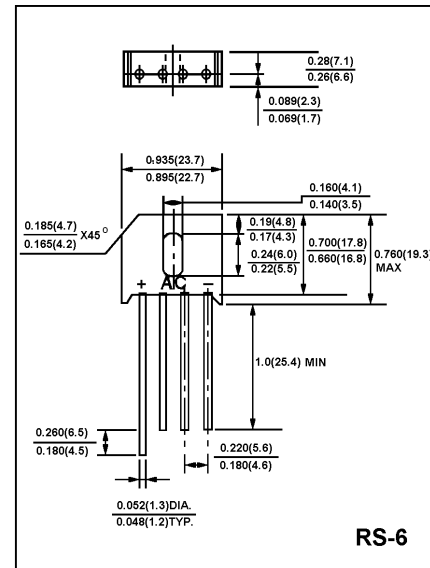
SINGLE-PHASE BRIDGE RECTIFIER
VOLTAGE RANGE 50 to 1000 Volts
CURRENT 6.0 Ampere

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

Characteristic	Symbol	RS601	RS602	RS603	RS604	RS605	RS606	RS607	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	$I_{O(AV)}$	$T_C=100$							A
		$T_A=40$ (Note 3)							
Non-Repetitive Peak Surge Current 8.3 ms Single half sine-wave superimposed on rated load	I_{FSM}	150							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	$T_A = 25$							uA
		$T_A = 100$							mA
$I^2 t$ Rating for Fusing($t < 8.3ms$)	$I^2 t$	93							A^2s
Typical Junction Capacitance per element (Note1)	C_J	105							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..

RS601 THRU RS607

FIG-1 FORWARD CURRENT DERATING CURVE

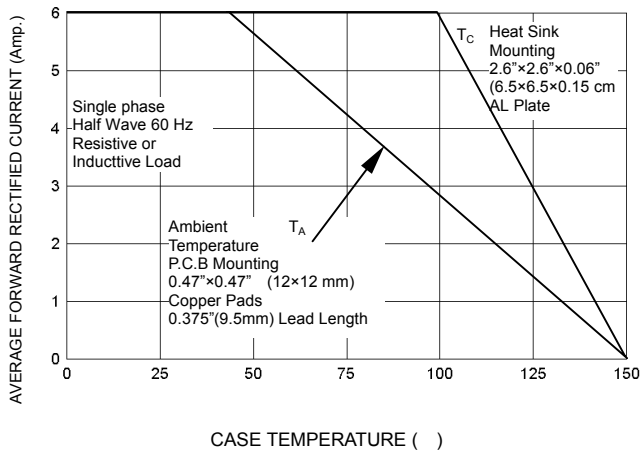


FIG-2 TYPICAL FORWARD CHARACTERISTICS

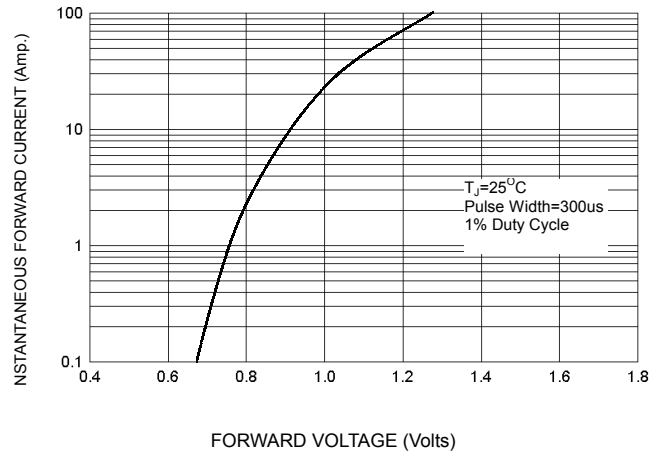


FIG-3 PEAK FORWARD SURGE CURRENT

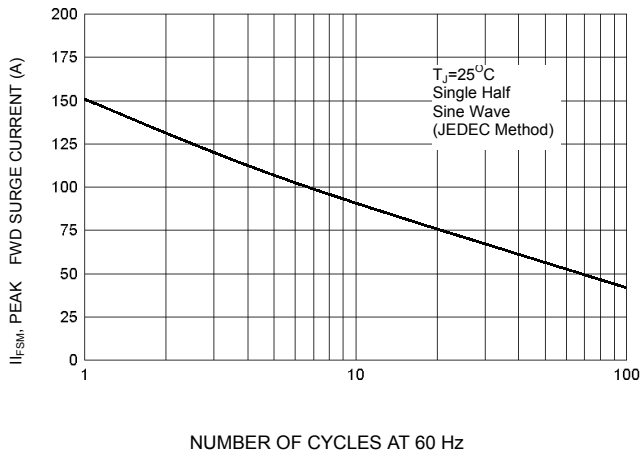


FIG-4 TYPICAL JUNCTION CAPACITANCE

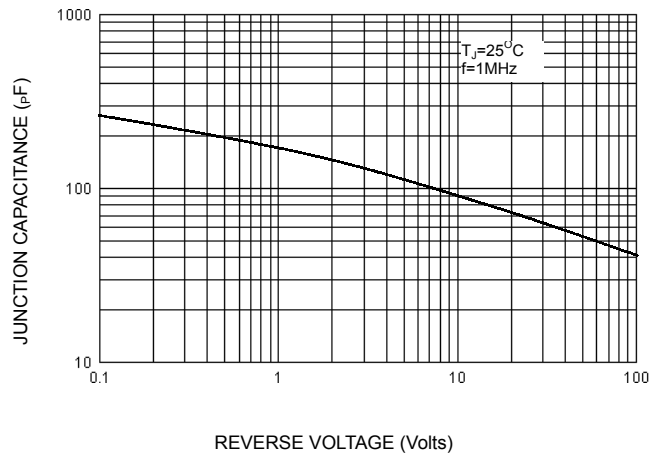


FIG-5 TYPICAL REVERSE CHARACTERISTICS

