

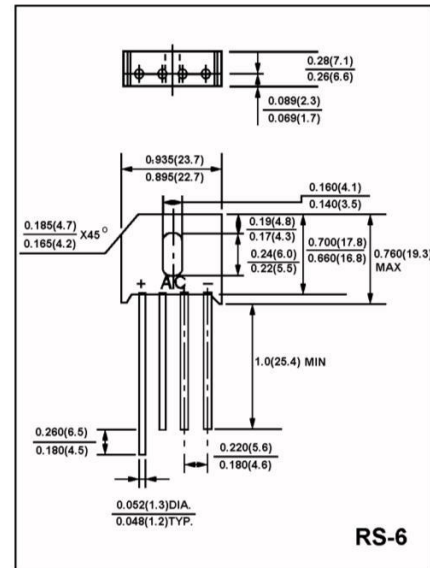
SINGLE-PHASE BRIDGE RECTIFIER
VOLTAGE RANGE 50 to 1000 Volts
CURRENT 6.0 Ampere

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	RS601	RS602	RS603	RS604	RS605	RS606	RS607	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V	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	$I_{O(AV)}$	$T_C = 100^\circ C$							A
		$T = 40^\circ C$ (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	$T_A = 25^\circ C$							uA
		$T_A = 100^\circ C$							mA
$I^2 t$ Rating for Fusing ($t < 8.3ms$)	$I^2 t$	93							A ² s
Typical Junction Capacitance per element (Note 1)	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							°C

Note: 1. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.

2. Unit mounted on 26 mil, 4x0.062 inch (0.335x0.510 mm) lead length with 5"x5" (12x12 mm) copper pads..

RS601 THRU RS607

FIG-1 FORWARD CURRENT DERATING CURVE

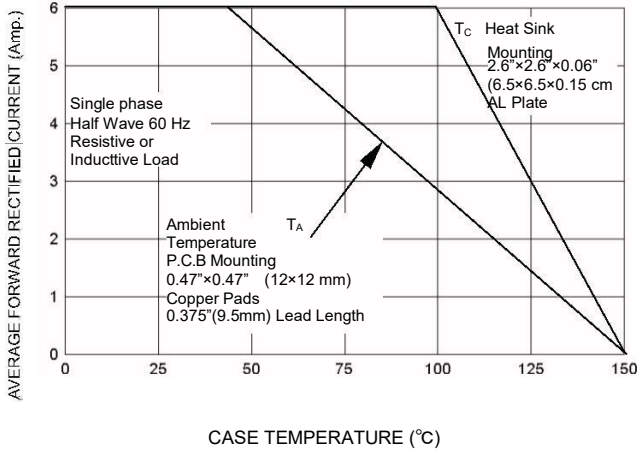


FIG-2 TYPICAL FORWARD CHARACTERISTICS

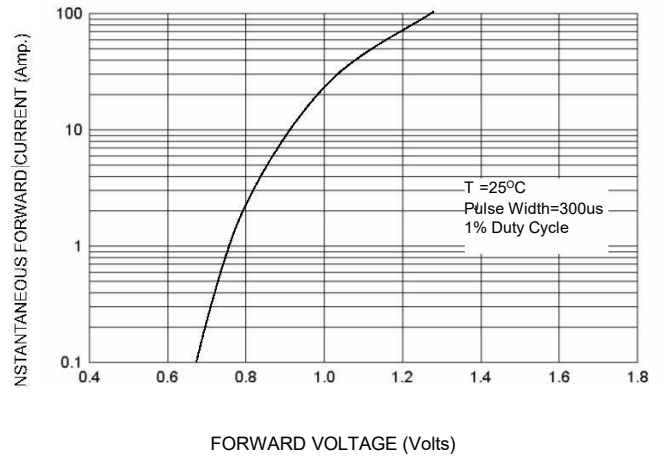


FIG-3 PEAK FORWARD SURGE CURRENT

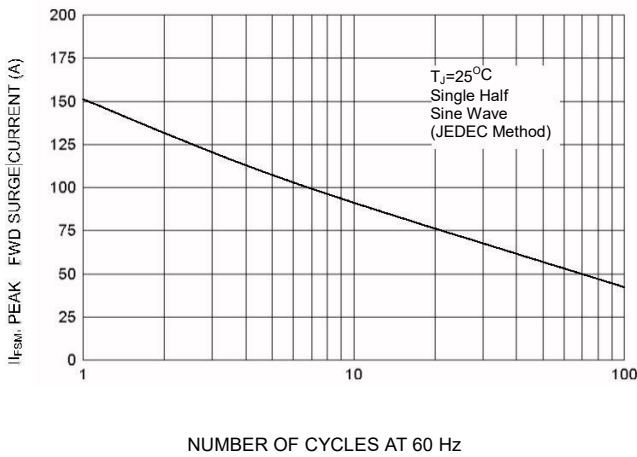


FIG-4 TYPICAL JUNCTION CAPACITANCE

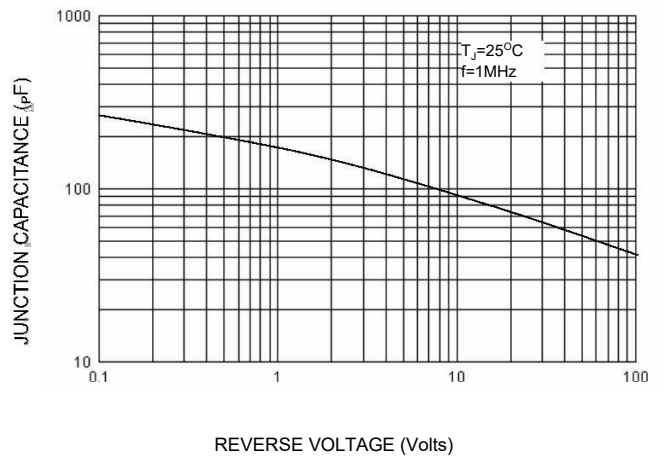


FIG-5 TYPICAL REVERSE CHARACTERISTICS

