

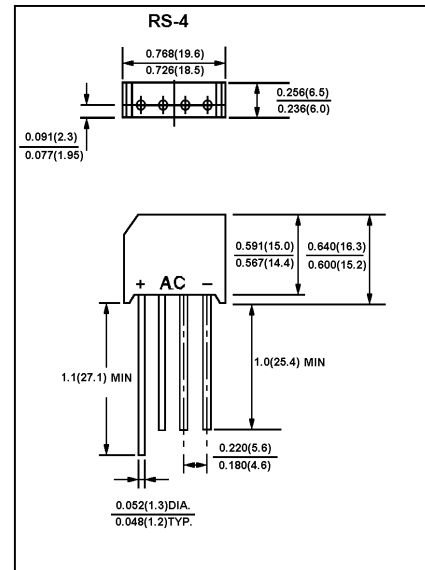
SINGLE-PHASE BRIDGE RECTIFIER
VOLTAGE RANGE 50 to 1000 Volts
CURRENT 4.0 Ampere

FEATURES

- * Low cost
- * High forward surge current capability
- * Ideal for printed circuit board
- * High temperature soldering guaranteed:
260°C/10 second 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 : As Marking on Body
- * Mounting Position: Any
- * Weight : 0.22 ounce, 6.21 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	RS401	RS402	RS403	RS404	RS405	RS406	RS407	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	50	100	200	400	600	800	1000	V
RMS Reverse Voltage	$V_{R(RMS)}$	35	70	140	280	420	560	700	V
Average Forward Rectified Output Current , at $T_C=50^\circ\text{C}$ (Note 2) $T_A=50^\circ\text{C}$ (Note 3)	$I_{O(AV)}$	4.0 3.0							A
Non-Repetitive Peak Surge Current 8.3 ms Single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	150							A
Forward Voltage (per element) ($I_F=4.0$ Amp)	V_{FM}	1.0							V
Maximum DC reverse current at rated DC blocking voltage per element $T_A=25^\circ\text{C}$ $T_A=100^\circ\text{C}$	I_R	10 1.0							uA mA
Rating for Fusing($t<8.3$ ms)	I^2t	93							A ² s
Typical Junction Capacitance per element (Note1)	C_J	55							pF
Typical Thermal Resistance (note 3)	$R_{\theta JA}$	20							k/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 3.0"×3.0"×0.11" thick (7.5×7.5×0.3 cm) AL, plate.
 3. P.C. board mount with 0.5"×0.5"(12×12mm) copper pad. 0.375"(9.5 mm)lead length.

RS401 thru RS407

FIG-1 FORWARD CURRENT DERATING CURVE

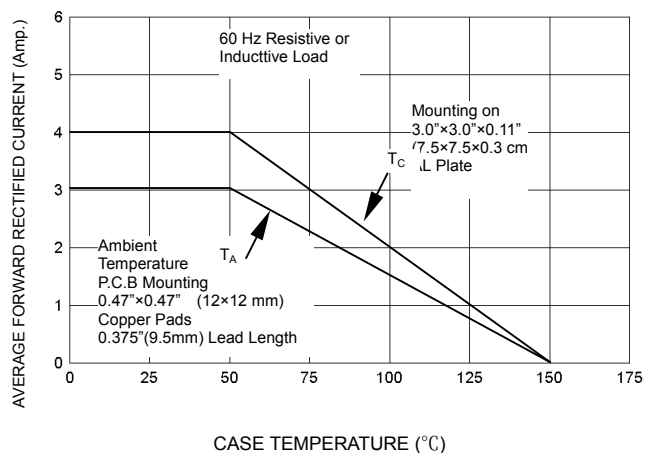


FIG-2 TYPICAL FORWARD CHARACTERISTICS

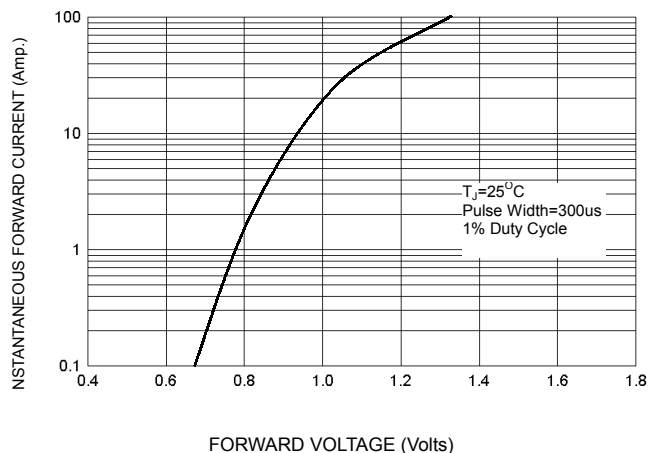


FIG-3 PEAK FORWARD SURGE CURRENT

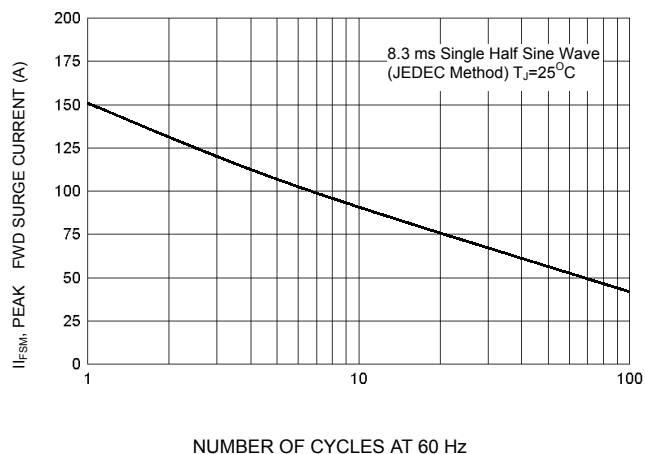


FIG-4 TYPICAL JUNCTION CAPACITANCE

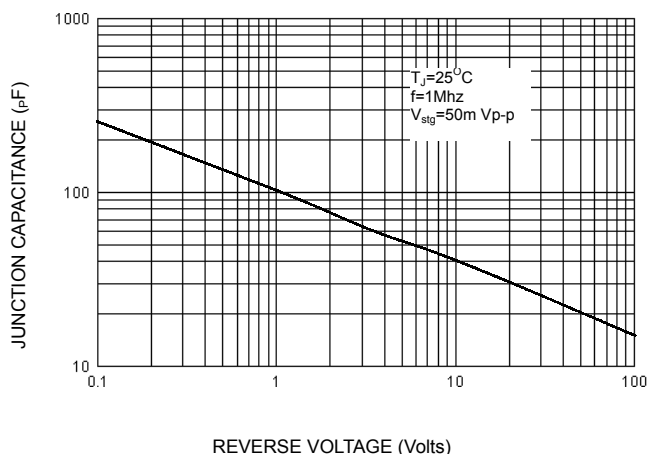


FIG-5 TYPICAL REVERSE CHARACTERISTICS

