



FUKUCOM COMPANY LTD.

福 靈 有 限 公 司

FLAT P, 3/F., EVEREST INDUSTRIAL CENTRE, 396 KWUN TONG ROAD,  
KWUN TONG, KOWLOON, HONG KONG.  
TEL: 2790-0314 FAX: 2790-0206



SINGLE-PHASE BRIDGE RECTIFIER

RS601 THUR RS607

VOLTAGE RANGE  
CURRENT

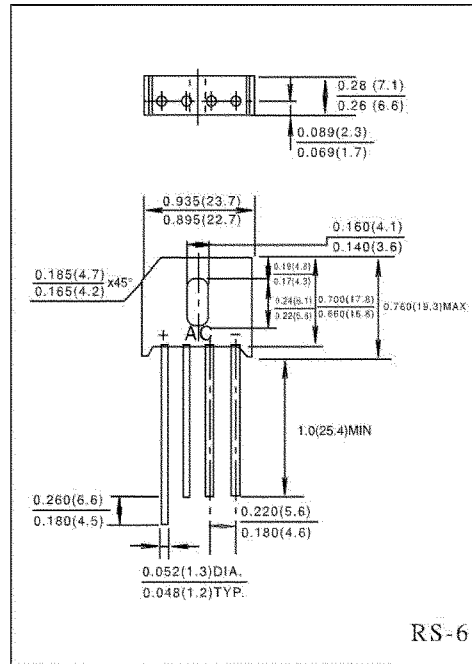
50 to 1000 Volts  
6.0 Ampere

FEATURES

- Low cost
- This series is UL recognized under component index, file number E127707
- 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
- 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: 0.3 ounce, 8.0 gram



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

	SYMBOLS	RS601	RS602	RS603	RS604	RS605	RS606	RS607	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 Output Current, at $T_C = 100^\circ C$ $T_A = 40^\circ C$ (Note3)	$I_{(AV)}$					6.0			Amps
Peak Forward Surge Current 8.3ms single half sine - wave superimposed on rated load (JEDEC method )	$I_{FSM}$					150			Amps
Rating for Fusing ( $t < 8.3ms$ )	$I^2t$					93			$A^2s$
Maximum Instantaneous Forward Voltage Drop per bridge element at 6.0A	$V_F$					1.0			Volts
Maximum DC Reverse Current at rated DC blocking voltage per element	$I_R$					10			$\mu A$
						1.0			mA
Typical Junction Capacitance (Note 1)	$C_j$					105			pF
Typical Thermal Resistance (Note 2)	$R_{\theta JC}$					4.7			$^\circ C/W$
Operating Temperature Range	$T_J$					(-65 to +150)			$^\circ C$
Storage Temperature Range	$T_{STG}$					(-65 to +150)			$^\circ C$

NOTES:

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



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RATINGS AND CHARACTERISTIC CURVES RS601 THRU RS607

FIG.1-DERATING CURVE FOR  
OUTPUT RECTIFIED CURRENT

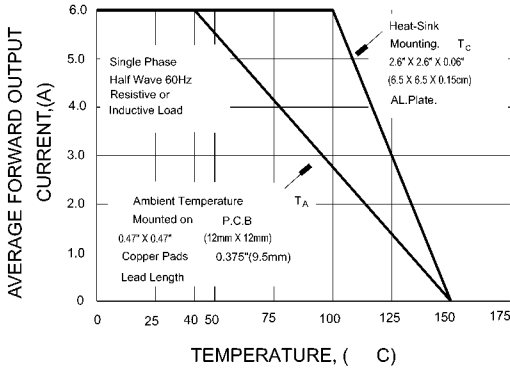


FIG.2-MAXIMUM NON-REPETITIVE PEAK  
FORWARD SURGE CURRENT PER ELEMENT

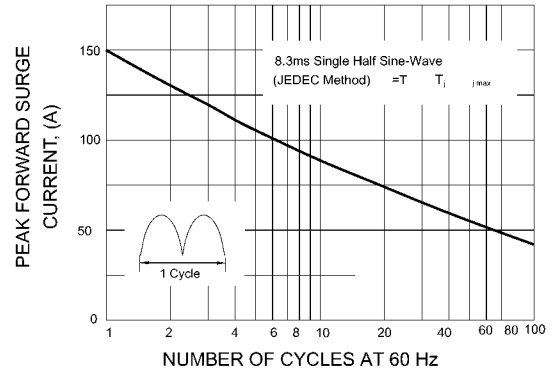


FIG.3-TYPICAL FORWARD CHARACTERISTICS  
PER BRIDGE ELEMENT

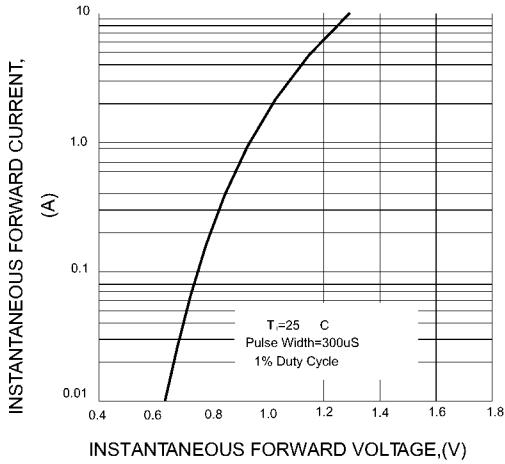


FIG.4-TYPICAL REVERSE CHARACTERISTICS  
PER BRIDGE ELEMENT

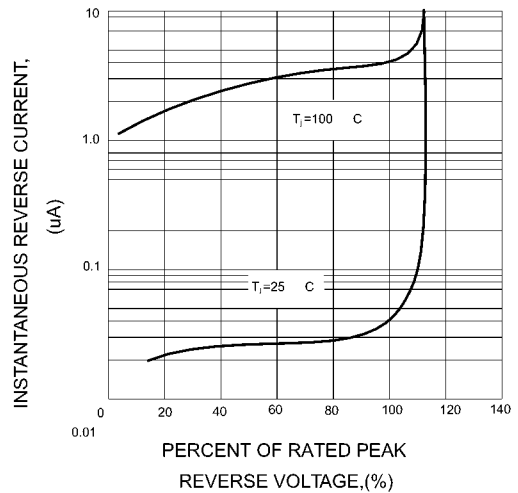


FIG.5-TYPICAL JUNCTION CAPACITANCE  
PER BRIDGE ELEMENT

