



SINGLE-PHASE BRIDGE RECTIFIER

RS401 THRU RS407

VOLTAGE RANGE
CURRENT

50 to 1000 Volts
4.0 Ampere

FEATURES

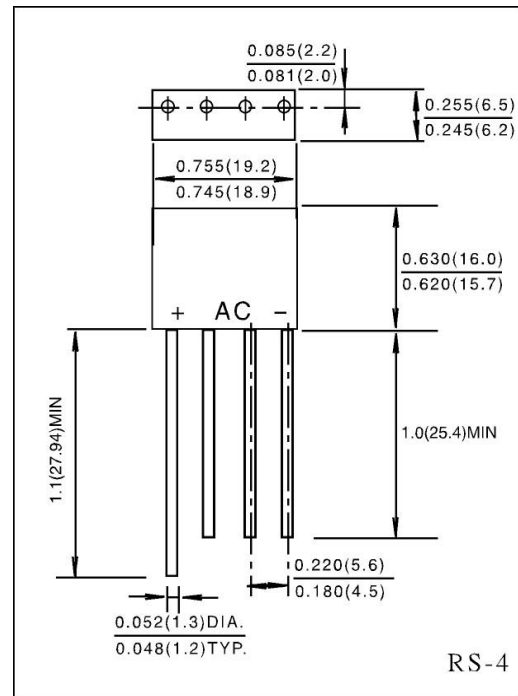
- Low cost
- This series is UL recognized under component index, file number E127707
- High forward surge current capability
- Ideal for printed circuit board
- High temperature soldering guaranteed:
260°C/10 second, 0.375" (9.5mm) lead length at 5 lbs. (2.3kg) tension.

MECHANICAL DATA

- Case: Transfer molded plastic
- Terminal: Lead solderable per MIL - STD - 202E method 208C
- Mounting Position: Any
- Weight: 0.22 ounce, 6.21 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	RS401	RS402	RS403	RS404	RS405	RS406	RS407	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	$T_C = 50^\circ\text{C}$ (Note2)	$I_{(AV)}$	4.0							Amps	
	$T_A = 50^\circ\text{C}$ (Note3)		3.0								
Peak Forward Surge Current 8.3ms single half sine - wave superimposed on rated load (JEDEC method)		I_{FSM}					150				Amps
Rating for Fusing ($t < 8.3\text{ms}$)		I^2t					93				A^2s
Maximum Instantaneous Forward Voltage Drop per bridge element at 4.0A		V_F					1.0				Volts
Maximum DC Reverse Current at rated DC blocking voltage per element	$T_A = 25^\circ\text{C}$	I_R					10				μA
	$T_A = 100^\circ\text{C}$						1.0				mA
Typical Junction Capacitance (Note 1)		C_j					55				pF
Typical Thermal Resistance (Note 2)		$R_{\theta JA}$					20				$^\circ\text{C}/\text{W}$
Operating Temperature Range		T_J					(-65 to +150)			$^\circ\text{C}$	
Storage Temperature Range		T_{STG}					(-65 to +150)				

NOTES:

1. Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts.
2. Unit mounted on 3.0" X 3.0" X 0.11" thick (7.5 X 7.5 X 0.3cm) Al. plate.
3. P.C. Broad mounted with 0.5" X 0.5" (12 X 12mm) copper pads. 0.375" (9.5mm) lead length.

RATINGS AND CHARACTERISTIC CURVES RS401 THRU RS407

FIG.1-DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

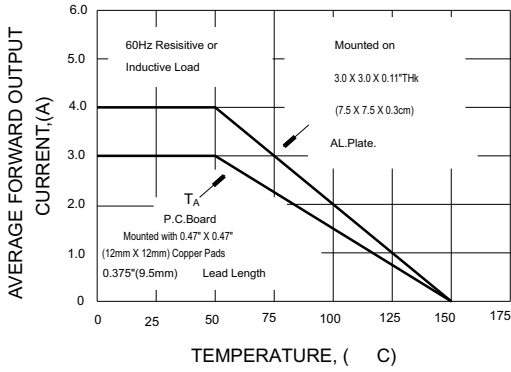


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER ELEMENT

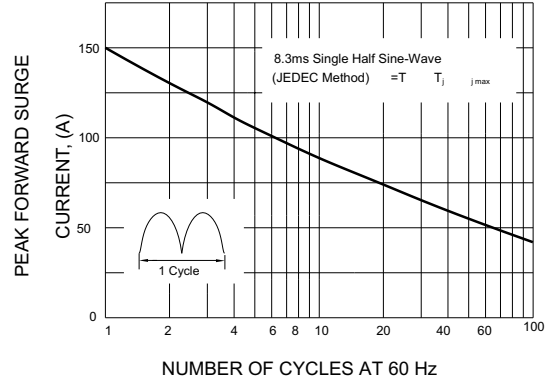


FIG.3-TYPICAL FORWARD CHARACTERISTICS PER BRIDGE ELEMENT

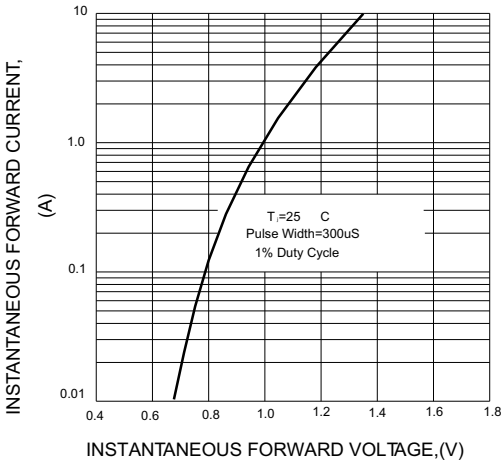


FIG.4-TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT

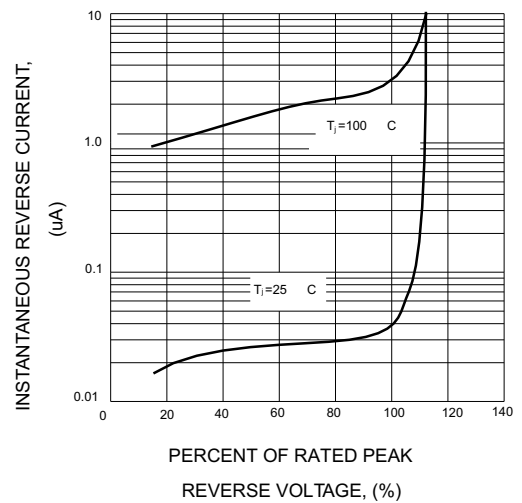


FIG.5-TYPICAL JUNCTION CAPACITANCE PER BRIDGE ELEMENT

