



## SINGLE PHASE BRIDGE RECTIFIER

**RS201 THRU RS207**

**VOLTAGE RANGE**  
**CURRENT**

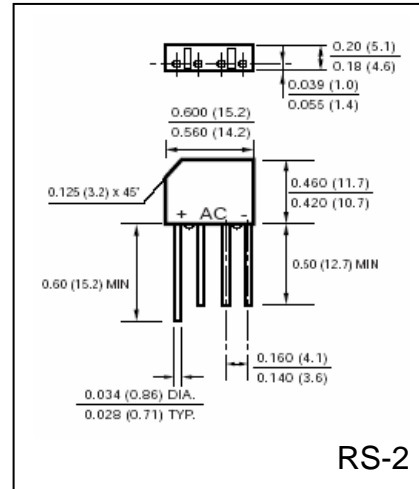
**50 to 1000 Volts**  
**2.0 Ampere**

### FEATURES

- UL recognized under component index, file Number E127707
- High forward surge current capability
- High temperature soldering guaranteed: 260°C / 10 seconds

### MECHANICAL DATA

- Case: Transfer molded plastic
- Terminal: Lead solderable per MIL-STD-202E method 208C
- Polarity: Polarity symbols marked on case
- Mounting: any
- Weight: 0.069 ounce, 1.95 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	RS201	RS202	RS203	RS204	RS205	RS206	RS207	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 Current, At $T_C = 50^\circ\text{C}$ (Note 1)	$I_{(AV)}$	2.0							Amps
Peak Forward Surge Current 8.3mS single half sine wave superimposed on rated load (JEDEC method)	$I_{FSM}$	50							Amps
Rating for Fusing ( $t < 8.3\text{mS}$ )	$I^2t$	10							$\text{A}^2\text{s}$
Maximum Instantaneous Forward Voltage drop per Bridge element 1.0A	$V_F$	1.0							Volts
Maximum DC Reverse Current at Rated $T_A = 25^\circ\text{C}$	$I_R$	10							$\mu\text{A}$
DC Blocking Voltage per element $T_A = 100^\circ\text{C}$		0.5							mA
Typical Junction Capacitance (Measured at 1.0MHz and applied reverse voltage of 4.0V)	$C_J$	20							pF
Typical Thermal Resistance (Note 1)	$R_{\theta Jc}$	28							$^\circ\text{C/W}$
Operating Junction Temperature Range	$T_J$	(-65 to +150)							$^\circ\text{C}$
Storage Temperature Range	$T_{STG}$	(-65 to +150)							$^\circ\text{C}$

### Notes:

1. Unit mounted on PC board with 0.47" x 0.47" (12mm x 12mm) copper pads, 0.375 (9.5mm) lead length.



## RATINGS AND CHARACTERISTIC CURVES RS201 THRU RS207

FIG.1-DERATING CURVE FOR  
OUTPUT RECTIFIED CURRENT

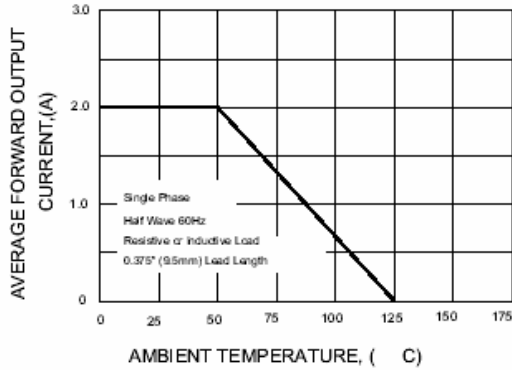


FIG.2-MAXIMUM NON-REPETITIVE PEAK  
FORWARD SURGE CURRENT PER ELEMENT

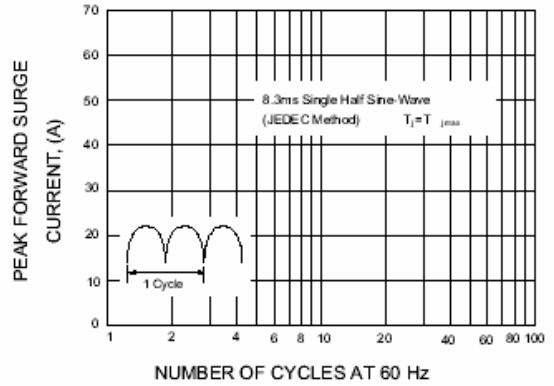


FIG.3-TYPICAL FORWARD CHARACTERISTICS  
PER BRIDGE ELEMENT

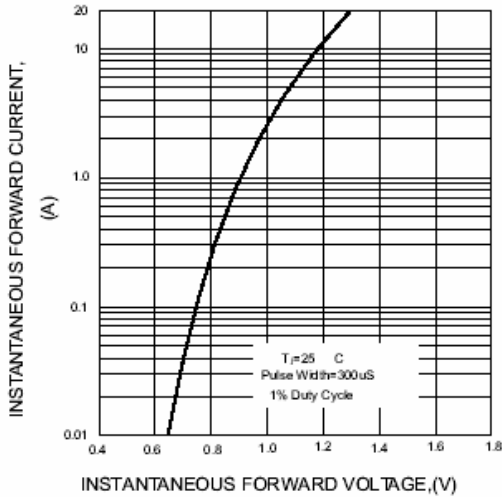


FIG.4-TYPICAL REVERSE CHARACTERISTICS  
PER BRIDGE ELEMENT

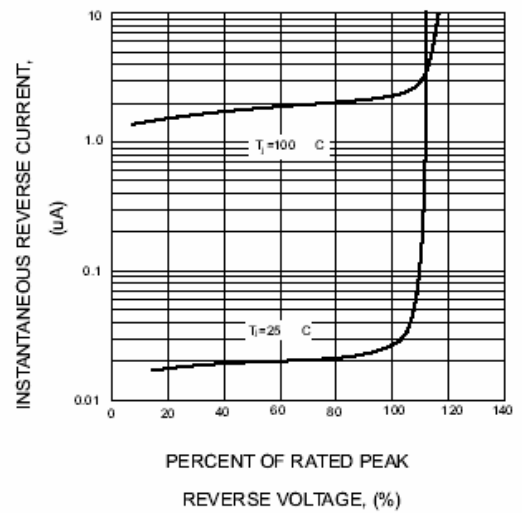


FIG.5-TYPICAL JUNCTION CAPACITANCE  
PER BRIDGE ELEMENT

