

SINGLE PHASE BRIDGE RECTIFIER

RS201 THRU RS207

VOLTAGE RANGE CURRENT **50 to 1000 Volts 2.0 Ampere**

FEATURES

· UL recognized

• High forward surge current capability

• High temperature soldering guaranteed: 260°C / 10 seconds

MECHANICAL DATA

Case: Transfer molded plastic

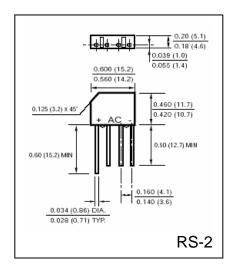
• Terminal: Lead solderable per MIL-STD-202E

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 $T_C = 50^{\circ}$ 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<8.3mS)	I^2t	10							A^2s
Maximum Instantaneous Forward Voltage drop per Bridge element 1.0A	V_{F}	1.0							Volts
Maximum DC Reverse Current at Rated $T_A = 25$ $^{\circ}$ C	т	10							μΑ
DC Blocking Voltage per element $T_A = 100$ $^{\circ}$ C	I_R	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							^o C/W
Operating Junction Temperature Range	T_{J}	(-65 to +150)						^o C	
Storage Temperature Range	T_{STG}	(-65 to +150)						^o 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

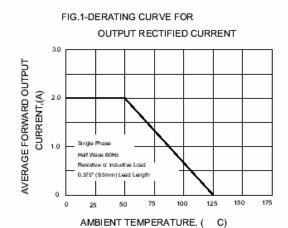
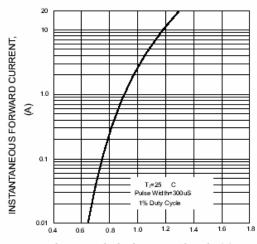


FIG.3-TYPICAL FORWARD CHARACTERISTICS
PER BRIDGE ELEMENT



INSTANTANEOUS FORWARD VOLTAGE,(V)

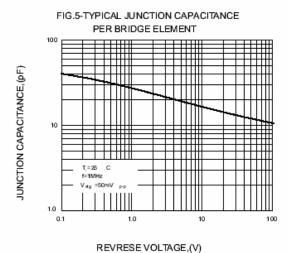


FIG.2-MAXIMUM NON-REPETITIVE PEAK

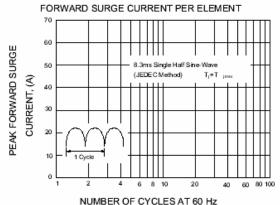
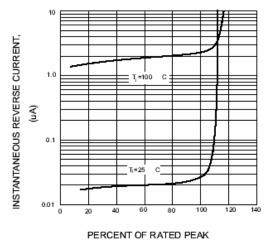


FIG.4-TYPICAL REVERSE CHARACTERISTICS
PER BRIDGE ELEMENT



REVERSE VOLTAGE, (%)