

RS201M THRU RS207M

SINGLE-PHASE GLASS PASSIVATED SILICON BRIDGE RECTIFIER

VOLTAGE RANGE 50 to 1000 Volts CURRENT 2.0 Ampere

FEATURES

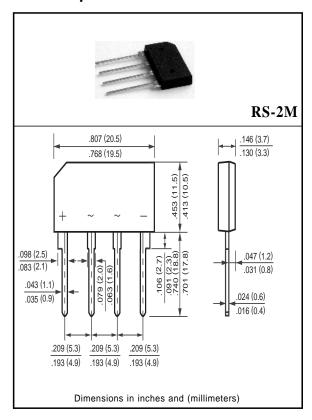
- * Ideal for printed circuit board
- * Mounting position: Any

MECHANICAL DATA

- * UL listed the recognized component directory, file #E94233
- * Epoxy: Device has UL flammability classification 94V-O

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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



MAXIMUM RATINGS (At TA = 25°C unless otherwise noted)

RATINGS	SYMBOL	RS201M	RS202M	RS203M	RS204M	RS205M	RS206M	RS207M	UNITS
Maximum Recurrent Peak Reverse Voltage	VRRM	50	100	200	400	600	800	1000	Volts
Maximum RMS Bridge Input Voltage	VRMS	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	VDC	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Output Current TA = 50°C	lo	2.0							Amps
Peak Forward Surge Current 8.3 ms single half sine-wave	IFSM	IFSM 50					Amps		
superimposed on rated load (JEDEC method)	IF5W	50							
Typical Junction Capacitance (Note1)	C1	15						pF	
Typical Thermal Resistance per leg (NOTE 2)	RθJA	37							°C/W
(NOTE 3)	RθJC	R 0 JC 11							
Operating Temperature Range	TJ	-55 to + 150						٥C	
Storage Temperature Range	Тѕтс	-55 to + 150							٥C

ELECTRICAL CHARACTERISTICS (At TA = 25°C unless otherwise noted)

CHARACTERISTICS		SYMBOL	RS201M	RS202M	RS203M	RS204M	RS205M	RS206M	RS207M	UNITS
Maximum Forward Voltage Drop per Bridgeat Element at 2.0A DC		VF	1.1						Volts	
Maximum Reverse Current at Rated	@TA = 25°C	l _R	5.0							uAmps
Dc Blocking Voltage per element	@Ta = 100°C		0.5							mAmps

NOTES: 1.Measured at 1 MHz and applied reverse voltage of 4.0 volts

- 2. Unit case mounted on 1.6 x 1.6 x 0.06" thick (4.0 x 4.0 x 0.15cm) Al. Plate
- 3. Units mounted on P.C.B. with 0.5 x 0.5" (12 x 12mm) copper pads and 0.375" (9.5mm) lead length
- 4. "Fully ROHS compliant", "100% Sn plating (Pb-free)".

2005-3

REV:A

RATING AND CHARACTERISTIC CURVES (RS201M THRU RS207M)

FIG. 1 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

60

8.3ms Single Half Sine-Wave (JEDED Method)

20

10

20

NUMBER OF CYCLES AT 60Hz

40 60

100

4 6 10

0

DERATING CURVE

2.0

(V)

1.5

60 Hz RESISTIVE
OR INDUCTIVE
LOAD

20

50

80

110

140

170

200

AMBIENT TEMPERATURE, (°C)

FIG. 2 - TYPICAL FORWARD CURRENT

