



# THE DATASHEET OF RS205M



**SINGLE-PHASE GLASS PASSIVATED  
SILICON BRIDGE RECTIFIER**  
VOLTAGE RANGE 50 to 1000 Volts CURRENT 2.0 Amperes

**FEATURES**

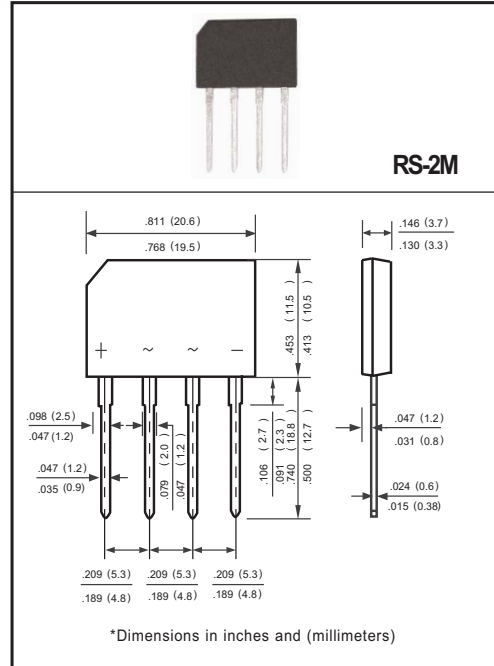
- \* Ideal for printed circuit board
- \* Surge overload rating: 60 amperes peak
- \* Mounting position: Any

**MECHANICAL DATA**

- \* Epoxy: Device has UL flammability classification 94V-0

**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

Ratings at 25 °C ambient temperature unless otherwise specified.  
resistive or inductive load.



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

RATINGS	SYMBOL	RS201M	RS202M	RS203M	RS204M	RS205M	RS206M	RS207M	UNITS
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage	V <sub>RMS</sub>	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	V <sub>DC</sub>	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified Current at T <sub>A</sub> = 50 °C	I <sub>O</sub>	2.0							Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I <sub>FSM</sub>	60							Amps
Current Squared Time	I <sup>2</sup> t	14.9							A <sup>2</sup> /Sec
Insulation voltage	V <sub>iso</sub>	3000							Volts
Typical Thermal Resistance (Note 1)	R <sub>θJC</sub>	11							°C/W
	R <sub>θJA</sub>	37							
Typical Junction Capacitance (Note 3)	C <sub>J</sub>	15							pF
Operating and Storage Temperature Range	T <sub>J</sub> , T <sub>STG</sub>	-55 to + 150							°C

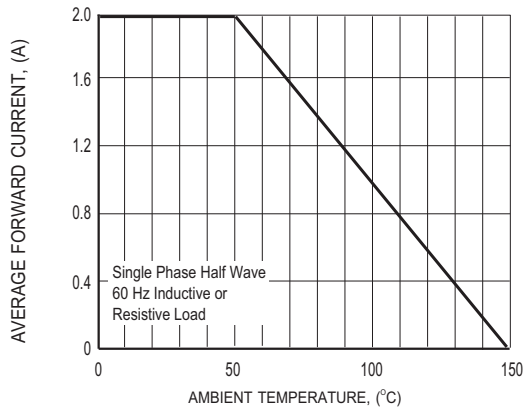
**ELECTRICAL CHARACTERISTICS (@TA=25 °C unless otherwise noted)**

CHARACTERISTICS	SYMBOL	RS201M	RS202M	RS203M	RS204M	RS205M	RS206M	RS207M	UNITS
Maximum Instantaneous Forward Voltage at 2.0A DC	V <sub>F</sub>	1.05							Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage	@T <sub>A</sub> = 25°C	0.2							uAmps
	@T <sub>A</sub> = 100°C	25							

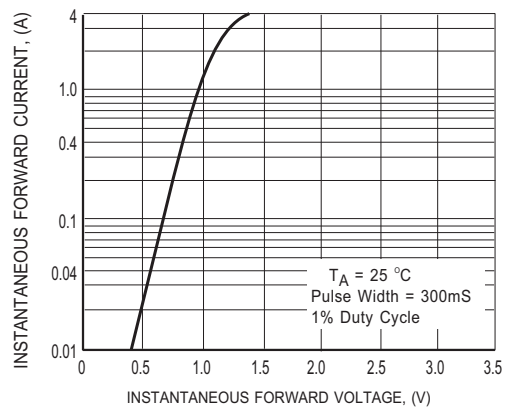
NOTES : 1. Thermal Resistance : Heat-sink case mounted or if PCB mounted.  
2. ROHS compliant\*  
3. Measured at 1MHz and applied reverse voltage of 4.0 volts.

2023-10/111  
REV:F

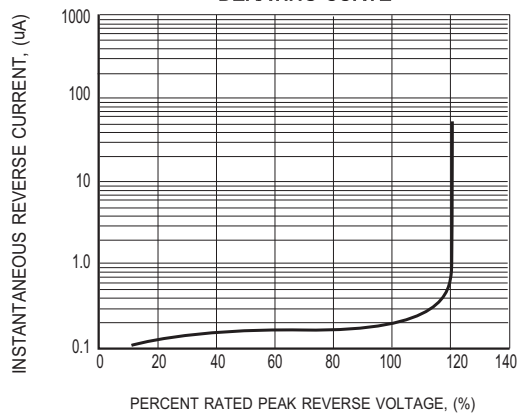
## RATING AND CHARACTERISTICS CURVES ( RS201M THRU RS207M )



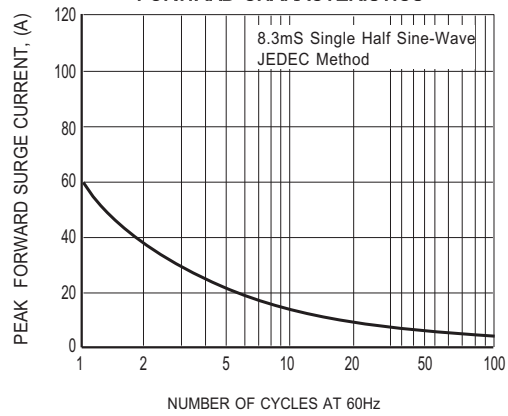
**FIG.1 TYPICAL FORWARD CURRENT DERATING CURVE**



**FIG.2 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS**

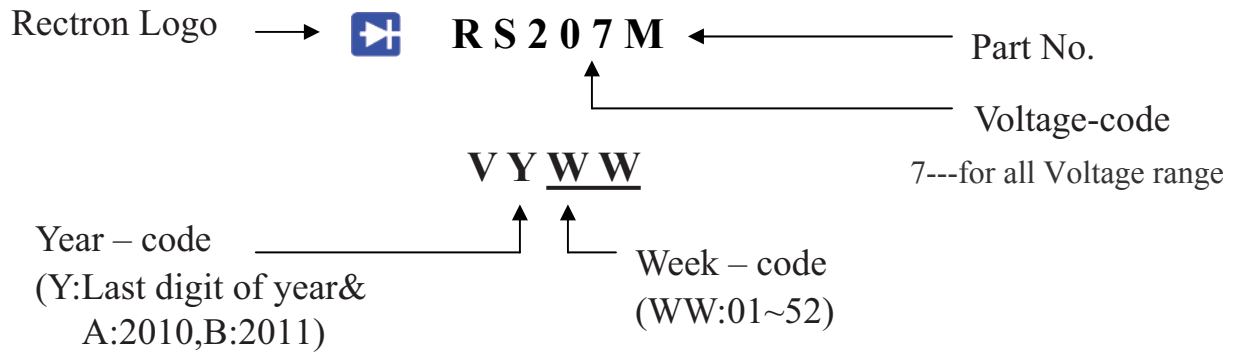


**FIG.3 MAXIMUM REVERSE CHARACTERISTICS**



**FIG.4 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT**

## Marking Description



## PACKAGING OF DIODE AND BRIDGE RECTIFIERS

### TUBE PACK

PACKAGE	PACKING CODE	EA PER BOX	INNER BOX SIZE (mm)	CARTON SIZE (mm)	EA PER CARTON	WEIGHT(Kg)
RS-2M	-C	1,000	448*158*65	465*335*155	4,000	15.00



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