

RS401M THRU RS407M

# SINGLE-PHASE GLASS PASSIVATED SILICON BRIDGE RECTIFIER

# VOLTAGE RANGE 50 to 1000 Volts CURRENT 4.0 Ampere

## **FEATURES**

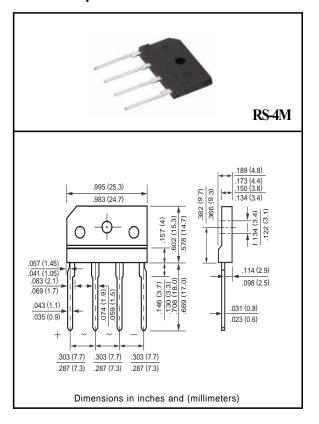
- \* Ideal for printed circuit board
- \* Surge overload rating: 200 amperes peak
- \* Mounting position: Any

## **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	RS401M	RS402M	RS403M	RS404M	RS405M	RS406M	RS407M	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 at Tc = 100°C	lo	4.0							Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	IFSM	150						Amps	
Operating Temperature Range	TJ	-55 to + 150							٥C
Storage Temperature Range	Тѕтс	-55 to + 150							٥C
Typical Junction Capacitance (Note)	Cl	40						pF	

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

CHARACTERISTICS		SYMBOL	RS401M	RS402M	RS403M	RS404M	RS405M	RS406M	RS407M	UNITS
Maximum Forward Voltage Drop per Bridgeat Element at 4.0A DC		VF	1.0						Volts	
Maximum Reverse Current at Rated	@TA = 25°C	l <sub>R</sub>	10							uAmps
Dc Blocking Voltage per element	@Tc = 100°C	"`	0.2							mAmps

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

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# RATING AND CHARACTERISTIC CURVES (RS401M THRU RS407M)

FIG. 1 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

(300
250
250
200
150
150
1 2 5 10 20 50 100
NUMBER OF CYCLES AT 60Hz

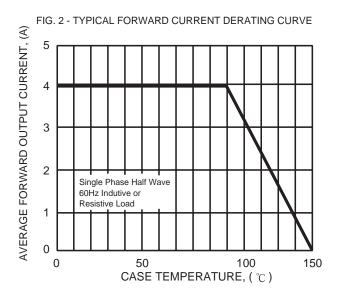


FIG. 3- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

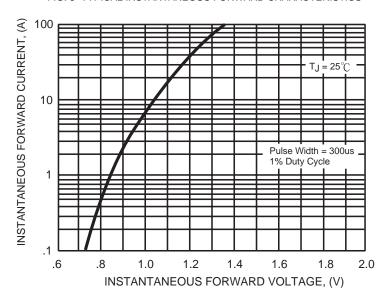


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

