

**SINGLE-PHASE SILICON BRIDGE RECTIFIER**

**VOLTAGE RANGE 50 to 1000 Volts CURRENT 25 Amperes**

**FEATURES**

- \* Low leakage
- \* Low forward voltage
- \* Mounting position: Any
- \* Surge overload rating: 300 amperes peak
- \* Ideal for printed circuit boards
- \* High forward surge current capability

**MECHANICAL DATA**

- \* UL listed in the recognized component directory, file #E94233
- \* Epoxy: Device has UL flammability classification 94V-0

**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	RS2501M	RS2502M	RS2503M	RS2504M	RS2505M	RS2506M	RS2507M	UNITS
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	50	100	200	400	600	800	1000	Volts
Maximum RMS Bridge Input 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 Output Current at Tc = 100°C with heatsink	I <sub>o</sub>	25							Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load	I <sub>FSM</sub>	300							Amps
Operating and Storage Temperature Range	T <sub>J</sub> , T <sub>STG</sub>	-55 to + 150							°C

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

CHARACTERISTICS	SYMBOL	RS2501M	RS2502M	RS2503M	RS2504M	RS2505M	RS2506M	RS2507M	UNITS
Maximum Forward Voltage Drop per element at 12.5A DC	V <sub>F</sub>	1.1							Volts
Maximum Reverse Current at Rated	I <sub>R</sub>	10							uAmps
DC Blocking Voltage per element		0.2							mAmps

# RATING AND CHARACTERISTIC CURVES (RS2501M THRU RS2507M)

