

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 _{RRM}	50	100	200	400	600	800	1000	Volts
Maximum RMS Bridge Input 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 Output Current at Tc = 100°C with heatsink	I _o	25							Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load	I _{FSM}	300							Amps
Operating and Storage Temperature Range	T _J , T _{STG}	-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 _F	1.1							Volts
Maximum Reverse Current at Rated	I _R	10							uAmps
DC Blocking Voltage per element		0.2							mAmps

RATING AND CHARACTERISTIC CURVES (RS2501M THRU RS2507M)

