RECTRON
SEMICONDUCTOR
TECHNICAL SPECIFICATION

RS801M
THRU
RS807M

SINGLE-PHASE SILICON BRIDGE RECTIFIER

VOLTAGE RANGE 50 to 1000 Volts CURRENT 8.0 Amperes

FEATURES

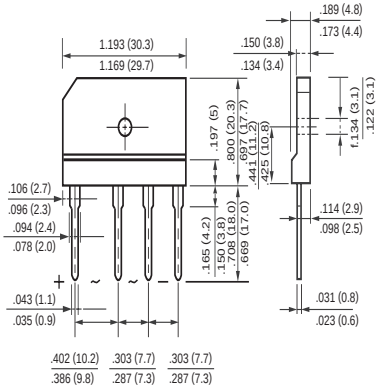
* Low leakage
* Low forward voltage
* Mounting position: Any
* Surge overload rating: 200 amperes peak
* Ideal for printed circuit boards
* High forward surge current capability

MECHANICAL DATA

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



RS-8M



Dimensions in inches and (millimeters)

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 T_A = 25°C unless otherwise noted)

RATINGS	SYMBOL	RS801M	RS802M	RS803M	RS804M	RS805M	RS806M	RS807M	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 = 75°C	I_O	8.0							Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load	I_{FSM}	200							Amps
Operating and Storage Temperature Range	T_J,T_{STG}	-55 to + 150							°C

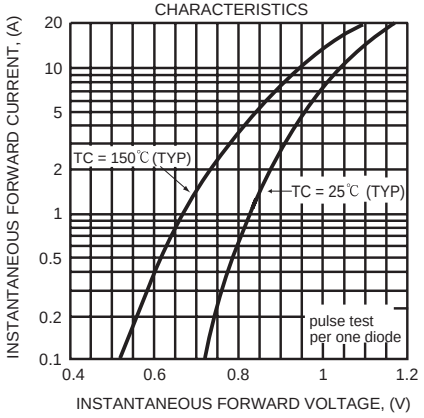
ELECTRICAL CHARACTERISTICS (At T_A = 25°C unless otherwise noted)

CHARACTERISTICS		SYMBOL	RS801M	RS802M	RS803M	RS804M	RS805M	RS806M	RS807M	UNITS
Maximum Forward Voltage Drop per element at 8.0A DC		V_F	1.1							Volts
Maximum Reverse Current at Rated	@T_A = 25°C	I_R	10							uAmps
DC Blocking Voltage per element	@T_C = 100°C		0.2							mAmps

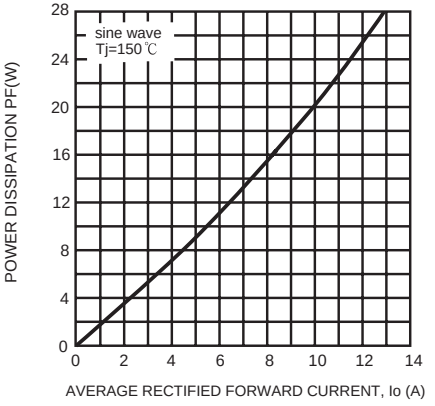
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RATING AND CHARACTERISTIC CURVES (RS801M THRU RS807M)

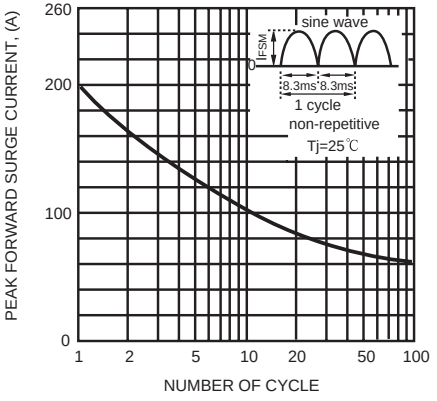
TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



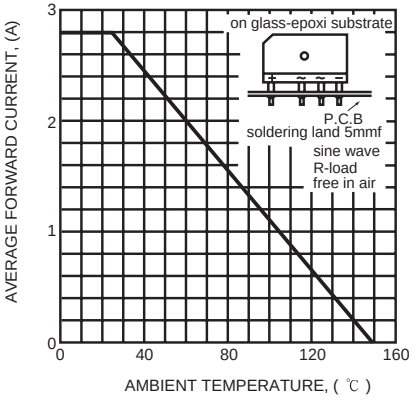
POWER DISSIPATION



SURGE FORWARD CURRENT CAPABILITY



TYPICAL FORWARD CURRENT DERATING CURVE



TYPICAL FORWARD CURRENT DERATING CURVE

