

RS401M THRU RS407M

SINGLE-PHASE GLASS PASSIVATED SILICON BRIDGE RECTIFIER VOLTAGE RANGE 50 to 1000 Volts CURRENT 4.0 Amperes

FEATURES

- * Ideal for printed circuit board
- * Surge overload rating: 130 amperes peak
- * Mounting position: Any

MECHANICAL DATA

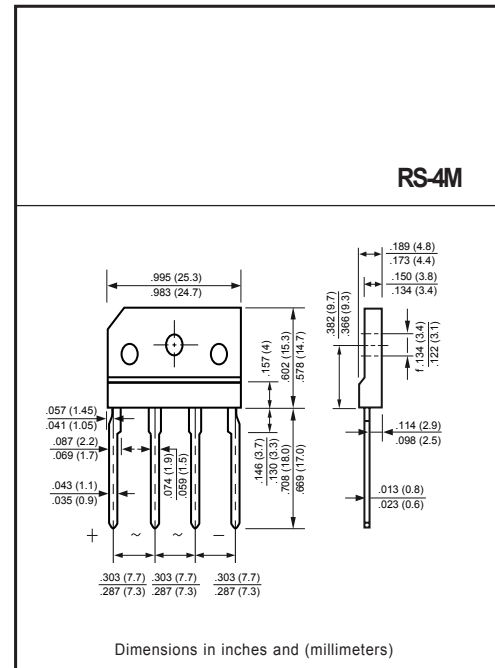
- * Epoxy: Device has UL flammability classification 94V-0
- * Epoxy: UL listed the recognized component, file #94233

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 (@ TA=25 °C unless otherwise noted)

RATINGS	SYMBOL	RS401M	RS402M	RS403M	RS404M	RS405M	RS406M	RS407M	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	Volts
Maximum RMS 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 Current at $T_A = 50^\circ\text{C}$	I_O	4.0							Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	130							Amps
Current Squared Time	I^2t	70							A ² S
Typical Thermal Resistance (Note 1)	$R_{\theta JC}$	6.0							°C/W
	$R_{\theta JA}$	26							
Operating and Storage Temperature Range	T_J, T_{STG}	-55 to + 150							°C

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

CHARACTERISTICS	SYMBOL	RS401M	RS402M	RS403M	RS404M	RS405M	RS406M	RS407M	UNITS
Maximum Instantaneous Forward Voltage at 4.0A DC	V_F	1.1							Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage	@ $T_A = 25^\circ\text{C}$	5.0							uAmps
	@ $T_A = 100^\circ\text{C}$	100							

NOTES : 1. Thermal Resistance : Heat-sink case mounted or if PCB mounted.
2. "Fully ROHS compliant", "100% Sn plating (Pb-free)".

2007-10

RATING AND CHARACTERISTICS CURVES (RS401M THRU RS407M)

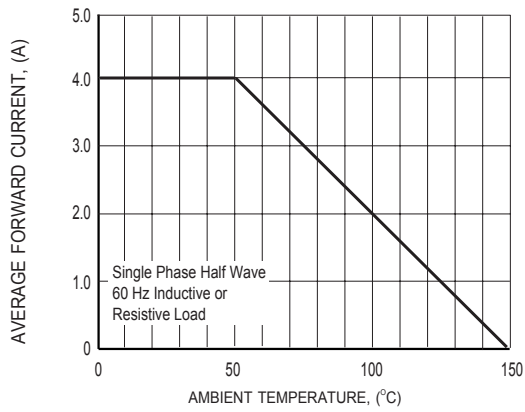


FIG.1 TYPICAL FORWARD CURRENT DERATING CURVE

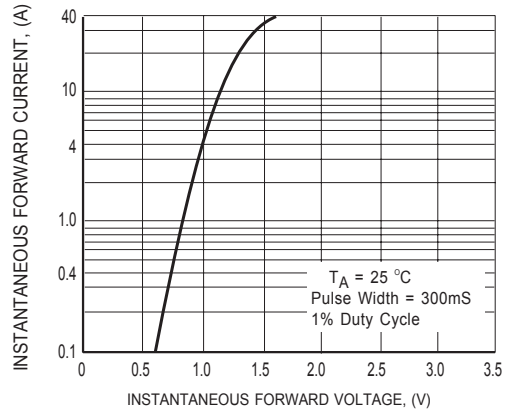


FIG.2 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

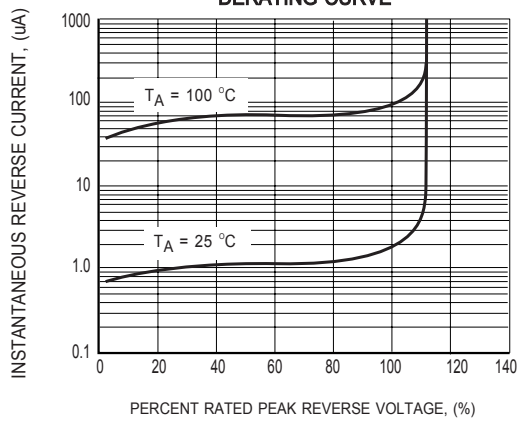


FIG.3 TYPICAL REVERSE CHARACTERISTICS

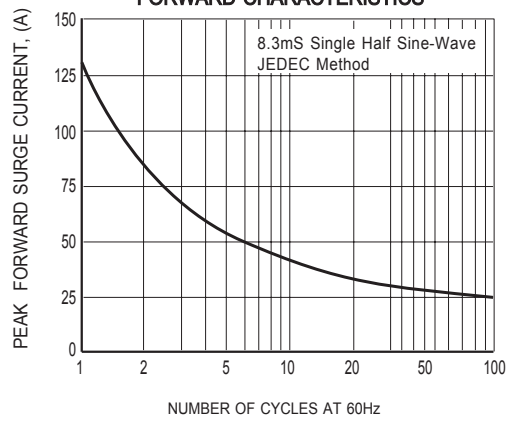


FIG.4 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

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