

**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: 150 amperes peak
- * Mounting position: Any

MECHANICAL DATA

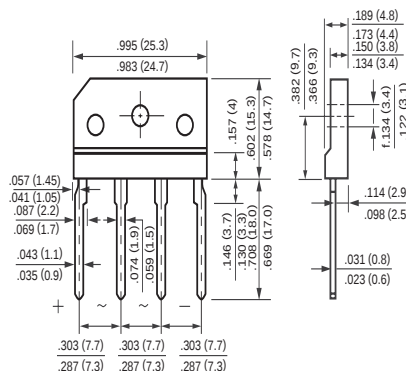
- * UL listed the recognized component directory, file #E94233
- * Epoxy: Device has UL flammability classification 94V-O

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%.



RS-4M



MAXIMUM RATINGS (At $T_A = 25^\circ\text{C}$ 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 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 Output Current at T _C = 100°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}	150							Amps
Typical Thermal Resistance per leg (Note 3) (Note 2)	R _{θJA}	26							°C/W
	R _{θJC}	6.0							
Operating Temperature Range	T _J	-55 to + 150							°C
Storage Temperature Range	T _{STG}	-55 to + 150							°C
Typical Junction Capacitance (Note)	C _J	40							pF

ELECTRICAL CHARACTERISTICS (At $T_A = 25^\circ\text{C}$ unless otherwise noted)

CHARACTERISTICS	SYMBOL	RS401M	RS402M	RS403M	RS404M	RS405M	RS406M	RS407M	UNITS
Maximum Forward Voltage Drop per Bridgeat Element at 4.0A DC	V_F	1.1							Volts
Maximum Reverse Current at Rated	I_R	5.0							μAmps
Dc Blocking Voltage per element		0.5							mAmps

- NOTES : 1. Measured at 1 MHz and applied reverse voltage of 4.0 volts
2. Unit case mounted on 1.6 x 1.6 x 0.06" thick (4.0 x 4.0 x 0.15cm) Al. Plate
3. Units mounted on P.C.B. with 0.5 x 0.5" (12 x 12mm) copper pads and 0.375" (9.5mm) lead length
4. "Fully ROHS compliant", "100% Sn plating (Pb-free)".

2005-01

REV:A

RATING AND CHARACTERISTIC CURVES (RS401M THRU RS407M)

FIG. 1 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

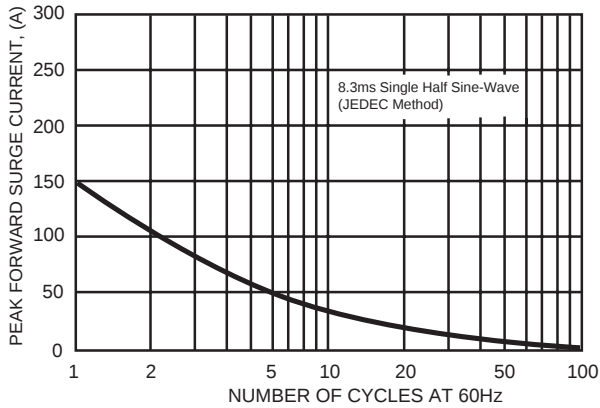


FIG. 2 - TYPICAL FORWARD CURRENT DERATING CURVE

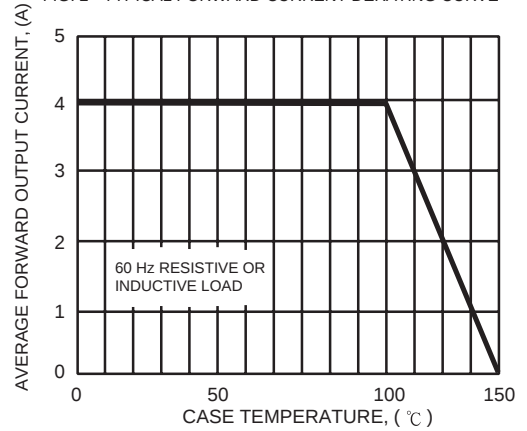


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

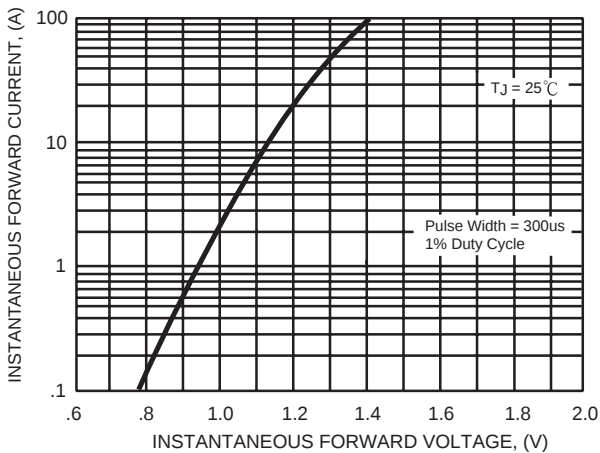


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

