



HIGH VOLTAGE SILICON RECTIFIER

HVM5 - HVM12

VOLTAGE RANGE - 5000 to 12000 V
CURRENT - 0.3 to 0.5 A

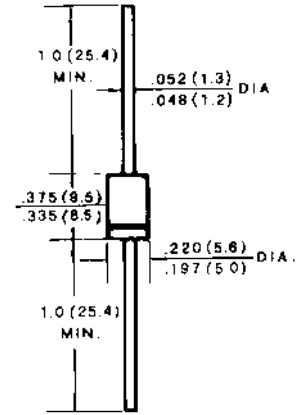
FEATURES

- Low leakage
- High surge capability
- High current capability
- High temperature soldering guaranteed: 200 °C/10 seconds, 0.375" (9.5mm) lead length at 5 lbs.(2.3kg) tension.

MECHANICAL DATA

- Case: Transfer molded plastic
- Epoxy: UL94V-0 rate flame retardant.
- Polarity: Color band denotes cathode end .
- Lead: Plated axial lead solderable per MIL-STD-202E method 208C
- Mounting Position: Any
- Weight: 0.05 ounce, 1.43 gram (DO-27)

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DO-27

Dimension in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load derate current by 20%.

	SYMBOLS	HVM5	HVM8	HVM10	HVM12	UNITS
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	5000	8000	10000	12000	Volts
Maximum RMS Voltage	V_{RMS}	3500	5600	7000	8400	Volts
Maximum DC Blocking Voltage	V_{DC}	5000	8000	10000	12000	Volts
Maximum Average Forward Rectified Current, 0.375" (9.5mm) Lead length at $T_A=50^\circ\text{C}$	$I_{(AV)}$	350				mAmps
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	50				Amps
Maximum Instantaneous Forward Voltage Drop at 0.35A/0.2A	V_F	3.5	7.0	9.0	9.5	Volts
Maximum DC Reverse Current at rated DC blocking voltage at	$T_A=25^\circ\text{C}$	5.0				μAmps
	$T_A=100^\circ\text{C}$	100				
Maximum Full Load Reverse Current ,full cycle average 0.375" (9.5mm) lead length at $T_L=75^\circ\text{C}$	$I_R(AV)$	75				μA
Operating and Storage Temperature Range	T_J, T_{STG}	-65 to +150				$^\circ\text{C}$



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RATINGS AND CHARACTERISTIC CURVES HVM5 - HVM12

FIG.1-TYPICAL FORWARD CURRENT
DERATING CURVE

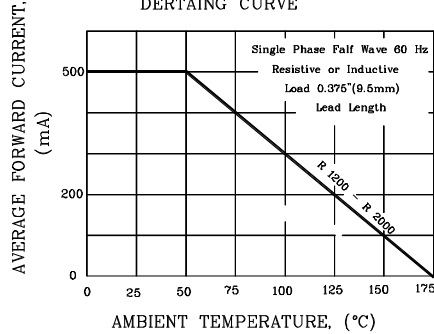


FIG.2-MAXIMUM NON-REPETITIVE PEAK
FORWARD SURGE CURRENT

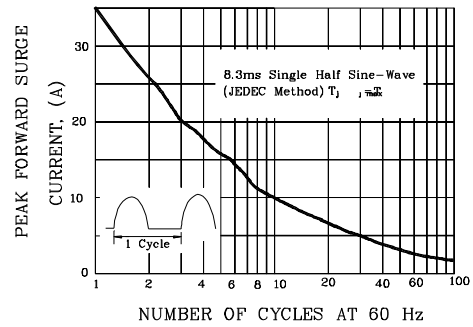


FIG.3-TYPICAL REVERSE
CHARACTERISTICS

