

# HVM5 THRU HVM16

## HIGH VOLTAGE ASSEMBLIED RECTIFIER

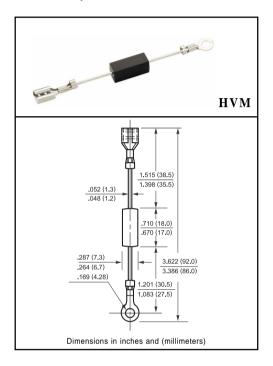
### VOLTAGE RANGE 5000 to 16000 Volts CURRENT 0.35 Amperes

#### **FEATURES**

- \* Low cost
- \* Low leakage
- \* Isolated case
- \* Surge overload rating 50 amperes peak
- \* Mounting position: Any
- \* Low forward voltage drop

#### 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	HVM5	HVM8	HVM10	HVM12	HVM14	HVM15	HVM16	UNITS
Maximum Recurrent Peak Reverse Voltage	VRRM	5	8	10	12	14	15	16	K Volts
Maximum RMS Voltage	VRMS	3.5	5.6	7.0	8.4	9.8	10.5	11.2	K Volts
Maximum DC Blocking Voltage	VDC	5	8	10	12	14	15	16	K Volts
Maximum Average Forward Rectified Current at TA = 50°C	lo	350							mAmps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	IFSM	50							Amps
Operating and Storage Temperature Range	TJ,TSTG	-20 to + 135							۰c

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

CHARACTERISTICS	SYMBOL	HVM5	HVM8	HVM10	HVM12	HVM14	HVM15	HVM16	UNITS
Maximum Instantaneous Forward Voltage at 0.35A DC	VF	8.0	14.0			14.0			Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage	lr	5.0						uAmps	

NOTES:1. Enough heat sink must be considered in application.

- 2. Operating and Storage Temperature : -20°C to +135°C
- 3. Suffix " L " for Wire type.

# RATING AND CHARACTERISTIC CURVES (HVM5 THRU HVM16)

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE 500 AVERAGE FORWARD CURRENT, (mA) Single Phase Half Wave 60Hz Inductive or 400 Resistive Load 300 200 100 0 0 100 150 175 50

AMBIENT TEMPERATURE, (°C)

