

## HIGH VOLTAGE ASSEMBLED 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

### MECHANICAL DATA

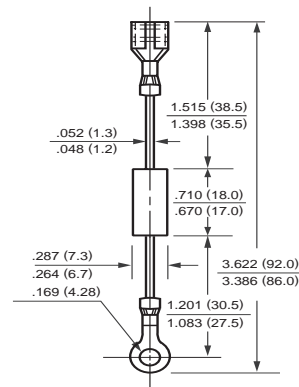
- \* Epoxy : Device has UL flammability classification 94V-0

### 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%.



**HVM**



Dimensions in inches and (millimeters)

### 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	IO	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 + 150							°C

### 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	V <sub>F</sub>	8.0	14.0						Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage	I <sub>R</sub>	5.0						uAmps	

NOTES:1. Enough heat sink must be considered in application.  
2. Operating and Storage Temperature : -20°C to +150°C  
3. Suffix " L " for Wire type.

# RATING AND CHARACTERISTIC CURVES ( HVM5 THRU HVM16 )

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

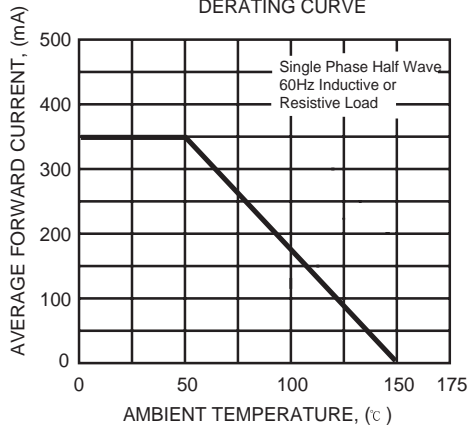


FIG. 2 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

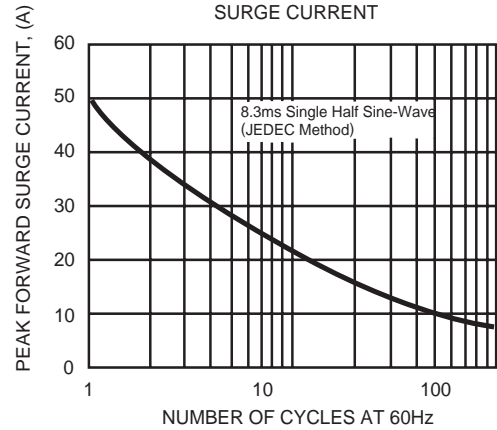


FIG. 3 - TYPICAL REVERSE CHARACTERISTICS

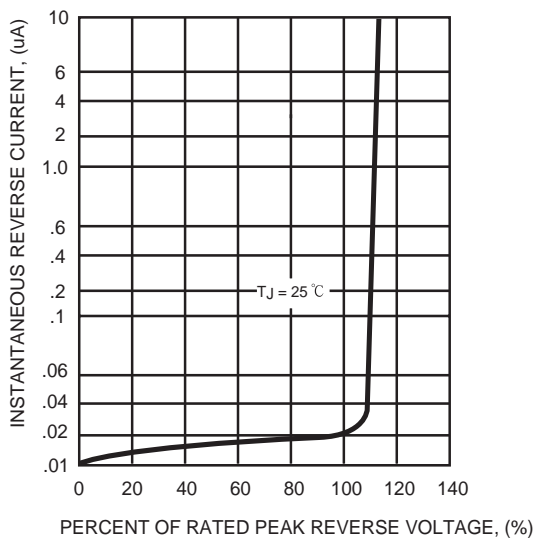


FIG. 4 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

