

**HIGH VOLTAGE ASSEMBLED RECTIFIER**

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

**FEATURES**

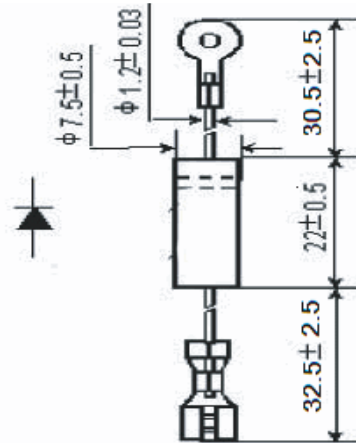
- \* Low cost
- \* Low leakage
- \* Isolated case
- \* Surge overload rating - 50 amperes peak
- \* Mounting position: Any
- \* Low forward voltage drop

**MECHANICAL DATA**

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



HVM



Dimensions in millimeters

**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	Io	350							mAmps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	IFSM	50							Amps
Typical Current Squared Time	I <sup>2</sup> t	10.37							A <sup>2</sup> /Sec
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	VF	8.0	14.0							Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage	IR	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

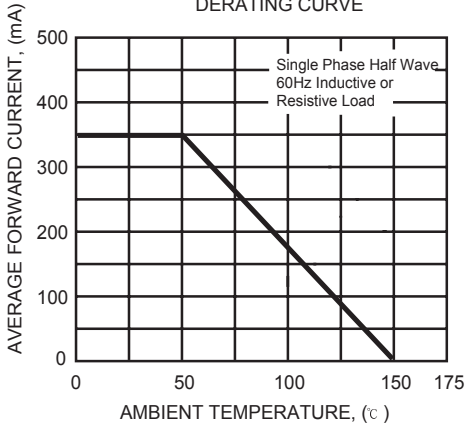


FIG. 2 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

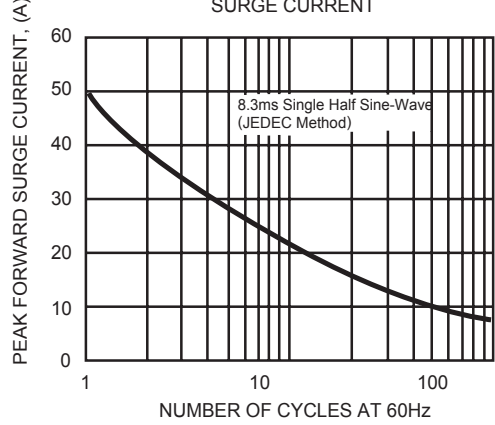


FIG. 3 - TYPICAL REVERSE CHARACTERISTICS

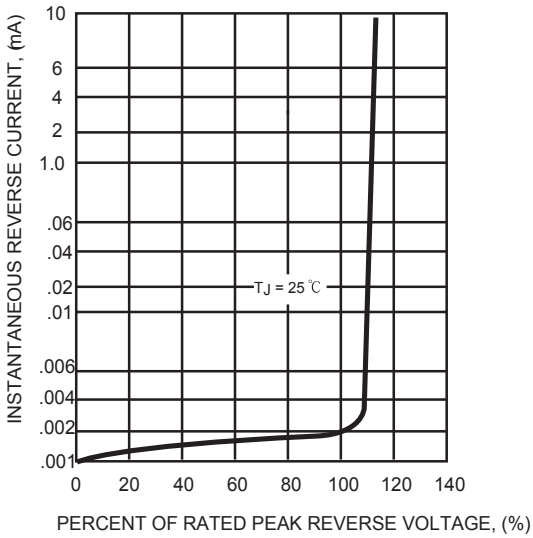
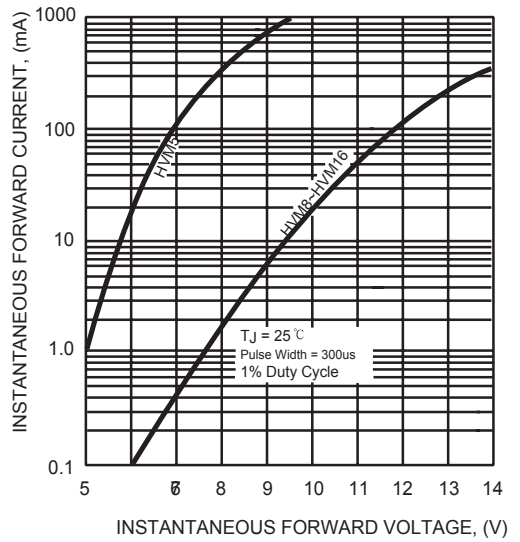


FIG. 4 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS





## Attachment information about HVMXX

### 1. Internal Circuit



### 2. Marking on the body

1) Power Frequency Series:

01-----350 mA    04-----500 mA

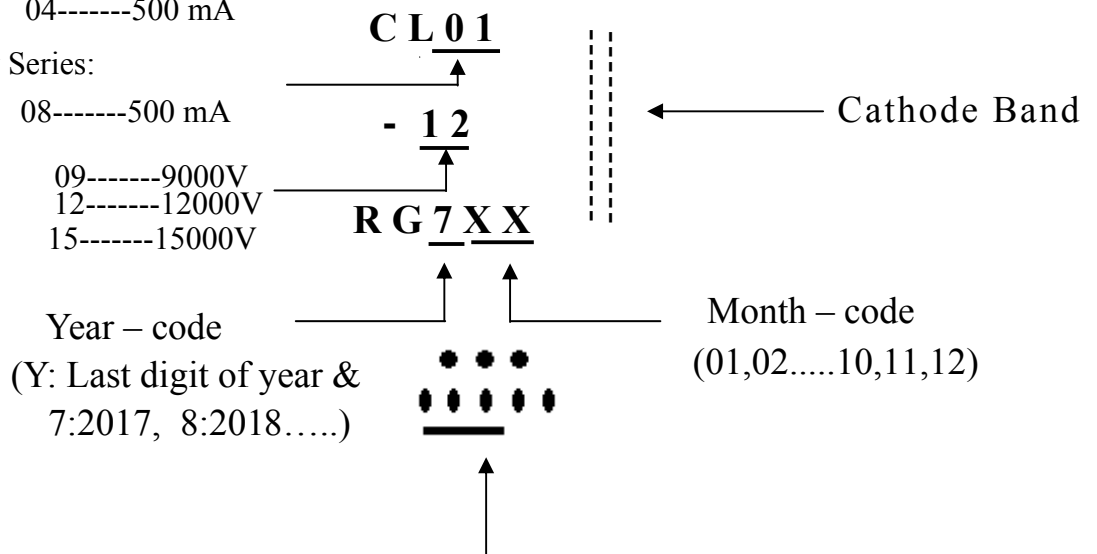
2) High Frequency Series:

03-----300 mA    08-----500 mA

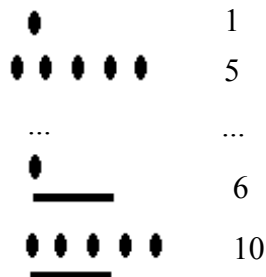
09-----9000V

12-----12000V

15-----15000V



#### Number of days



#### Number of month

- The first ten-day period of a month
- ● The middle ten-day period of a month
- ● ● The last ten-day period of a month

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