

**HVM5  
THRU  
HVM16**

**HIGH VOLTAGE ASSEMBLED RECTIFIER**

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

**FEATURES**

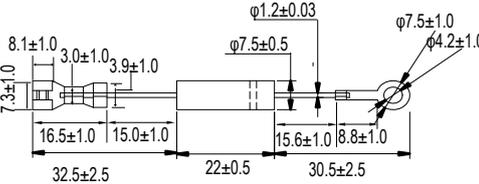
- \* Low cost
- \* Low leakage
- \* Isolated case
- \* Surge overload rating - 50 amperes peak
- \* Mounting position: Any
- \* Low forward voltage drop

**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)

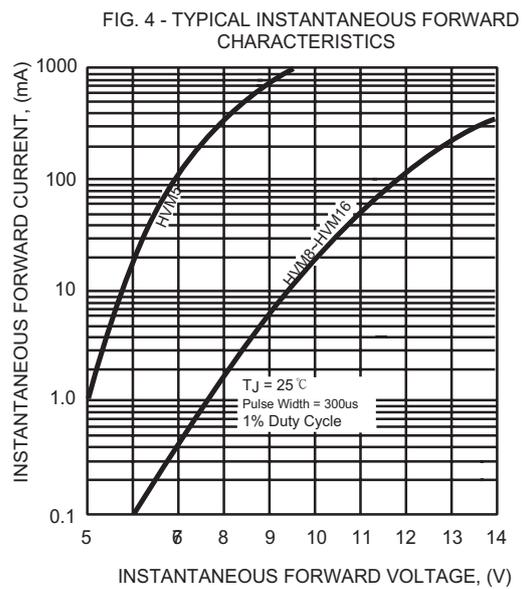
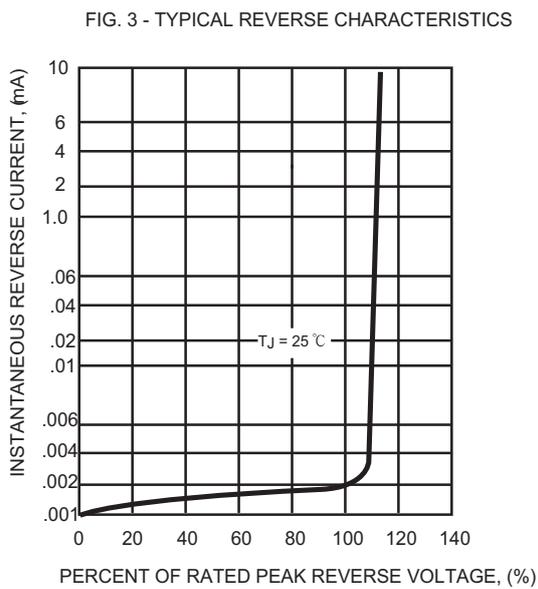
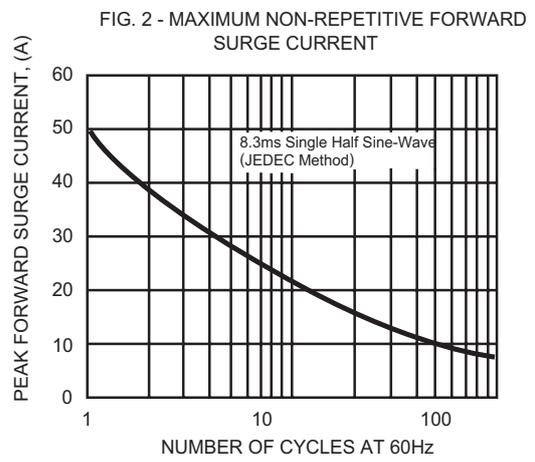
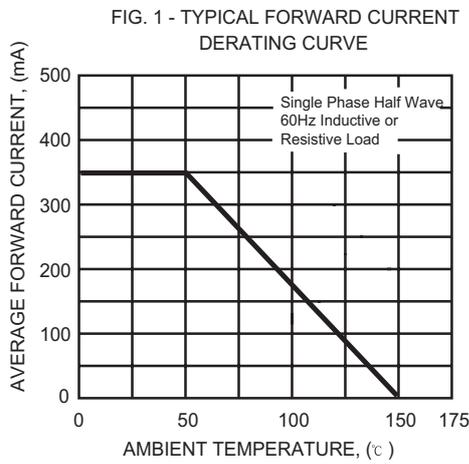
RATINGS	SYMBOL	HVM5	HVM8	HVM10	HVM12	HVM14	HVM15	HVM16	UNITS
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	5	8	10	12	14	15	16	K Volts
Maximum RMS Voltage	V <sub>RMS</sub>	3.5	5.6	7.0	8.4	9.8	10.5	11.2	K Volts
Maximum DC Blocking Voltage	V <sub>DC</sub>	5	8	10	12	14	15	16	K Volts
Maximum Average Forward Rectified Current at TA = 50°C	I <sub>o</sub>	350							mAmps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I <sub>FSM</sub>	50							Amps
Typical Current Squared Time	I <sup>2</sup> t	10.37							A <sup>2</sup> /Sec
Operating and Storage Temperature Range	T <sub>J</sub> , T <sub>STG</sub>	-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 )





## Attachment information about HVMXX

### 1. Internal Circuit



### 2. Marking on the body

1) Power Frequency Series:

01-----350 mA    04-----500 mA

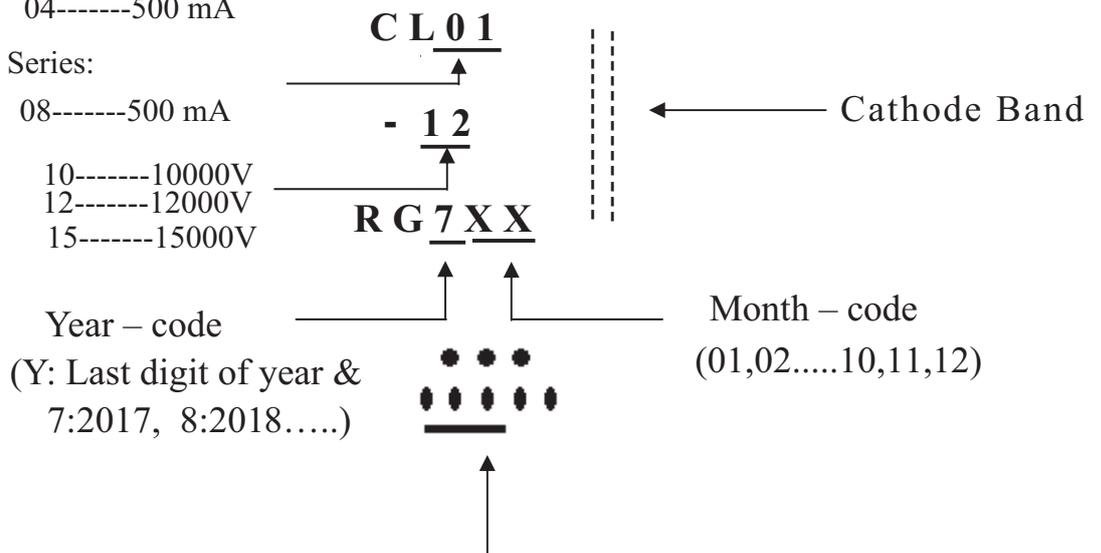
2) High Frequency Series:

03-----300 mA    08-----500 mA

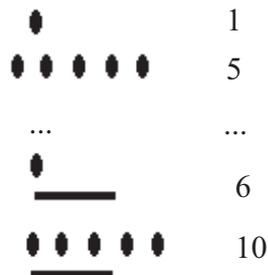
10-----10000V

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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