

HVP5 THRU HVP16

## HIGH VOLTAGE ASSEMBLIED RECTIFIER

### VOLTAGE RANGE 5000 to 16000 Volts CURRENT 0.75 Amperes

#### **FEATURES**

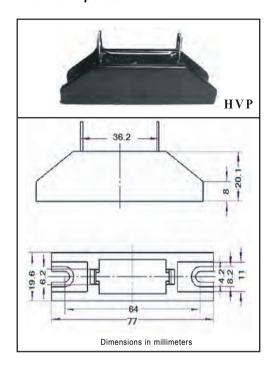
- \* Low cost
- \* Low leakage
- \* Isolated case
- \* Surge overload rating 50 amperes peak
- \* Mounting position: Any
- \* Low forward voltage drop

#### **MECHANICAL DATA**

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

### 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	HVP5	HVP8	HVP10	HVP12	HVP14	HVP15	HVP16	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	750						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	-55 to + 150							٥C

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

CHARACTERISTICS	SYMBOL	HVP5	HVP8	HVP10	HVP12	HVP14	HVP15	HVP16	UNITS
Maximum Instantaneous Forward Voltage at 0.75A DC	VF	8.0	14.0						Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage	lr	5.0					uAmps		

# RATING AND CHARACTERISTIC CURVES (HVP5 THRU HVP16)

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

750
Single Phase Half Wave 60Hz Inductive or Resistive Load

450
300

AVERAGE FORWARD CURRENT, (mA)

150

0

0

50

FIG. 2 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT 60 PEAK FORWARD SURGE CURRENT, (A) 50 8.3ms Single Half Sine-Wave (JEDEC Method) 40 30 20 10 0 10 100 1 NUMBER OF CYCLES AT 60Hz



AMBIENT TEMPERATURE, (°C)

100

150

175

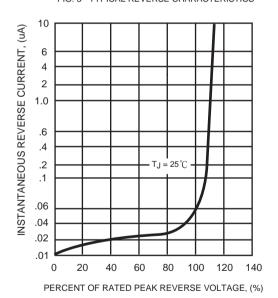
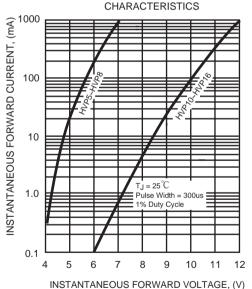


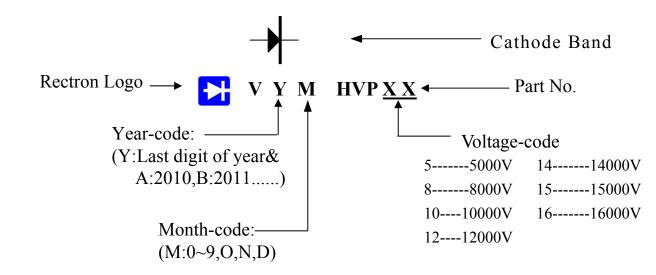
FIG. 4 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS





# Attachment information about HVPXX

# 1. Marking on the body



# 2. Items marked on the carton

CUSTOMER TYPE

**QUANTITY** 

LOT NO.

**REMARK** 

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