



SEP ELECTRONIC CORP.

**HVP5 thru HVP16****750 mA High Voltage Rectifier Assemblies**  
Rectifier Reverse Voltage 5000 to 16000V**Features**

- Isolated case
- Surge overload rating to 50A peak
- Low Forward Voltage Drop
- Typical reverse leakage current less than  $1\mu A$
- Plastic material has UL flammability classification 94V-0

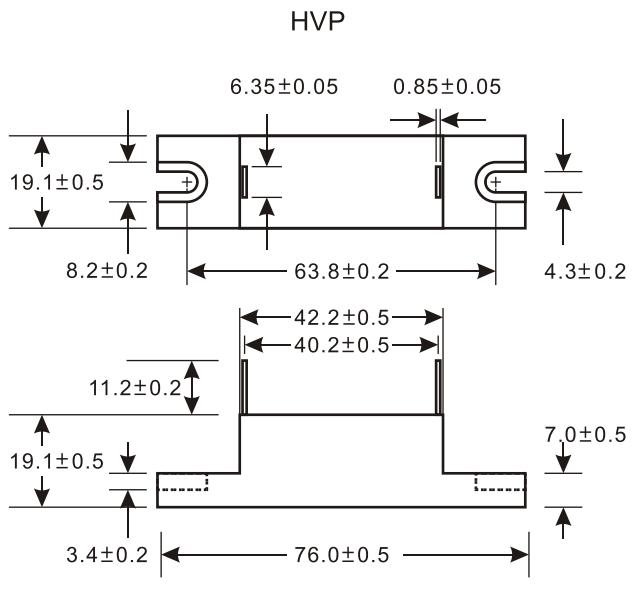
**Mechanical Data**

Case: Molded plastic

Terminals: Axial lead with terminals solderable per  
MIL-STD-202, Method 208

Polarity: Cathode band

Mounting Position: Any



All dimensions in millimeters

**Maximum Ratings & Thermal Characteristics**Rating at 25°C ambient temperature unless otherwise specified, Resistive or Inductive load, 60 Hz.  
For Capacitive load derate current by 20%.

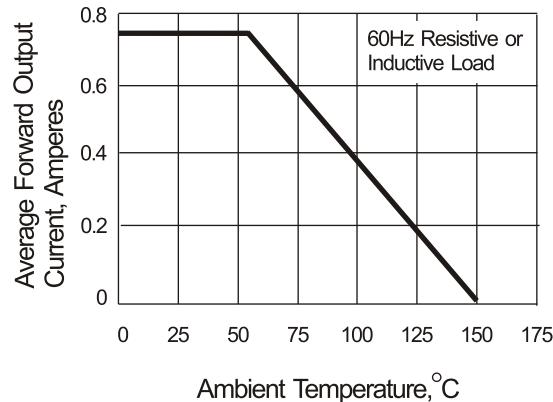
Parameter	Symbol	HVP5	HVP8	HVP10	HVP12	HVP14	HVP15	HVP16	unit
Maximum repetitive peak reverse voltage	VRRM	5000	8000	10000	12000	14000	15000	16000	V
Maximum RMS bridge input voltage	VRMS	3500	5600	7000	8400	9800	10500	11200	V
Maximum DC blocking voltage	VDC	5000	8000	10000	12000	14000	15000	16000	V
Maximum average forward rectified output current at TA=55°C	IF(AV)	750						mA	
Peak forward surge current single sine-wave superimposed on rated load (JEDEC Method)	IFSM	50.0						A	
Operating junction and storage temperature range	TJ, TSTG	-20 to + 135						°C	

**Electrical Characteristics**Rating at 25°C ambient temperature unless otherwise specified. Resistive or Inductive load, 60Hz.  
For Capacitive load derate by 20 %.

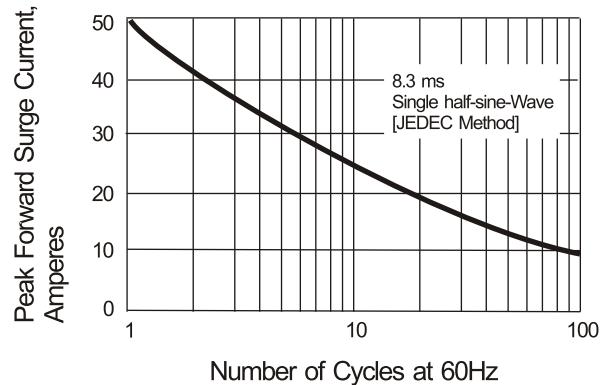
Parameter	Symbol	HVP5	HVP8	HVP10	HVP12	HVP14	HVP15	HVP16	Unit
Maximum instantaneous forward voltage drop at IF = 0.75A DC	VF	10.0		14.0		16.0		V	
Maximum DC reverse current at rated TA = 25°C DC blocking voltage per element	IR	5.0						μA	

**Rating and Characteristic Curves (  $T_A=25^\circ\text{C}$  Unless otherwise noted )**  
**HVP5 thru HVP16**

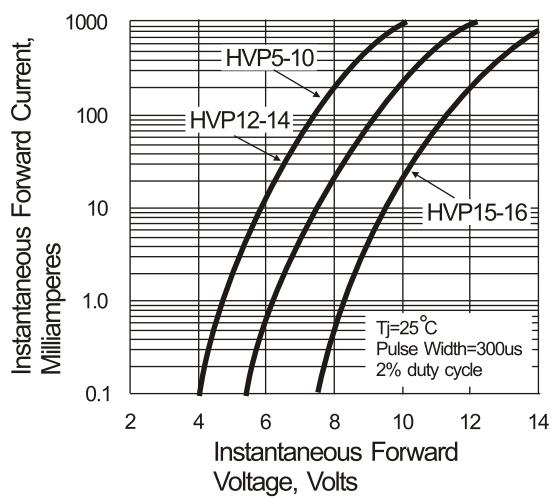
**Fig. 1 Derating Curve for Output Rectified Current**



**Fig. 2 Peak Forward Surge Current**



**Fig. 3 Typical Instantaneous Forward Characteristics**



**Fig. 4 Typical Reverse Characteristics**

