

# HVR125 - HVR180

**PRV : 2500 - 8000 Volts**

**Io : 0.2 - 0.5 Ampere**

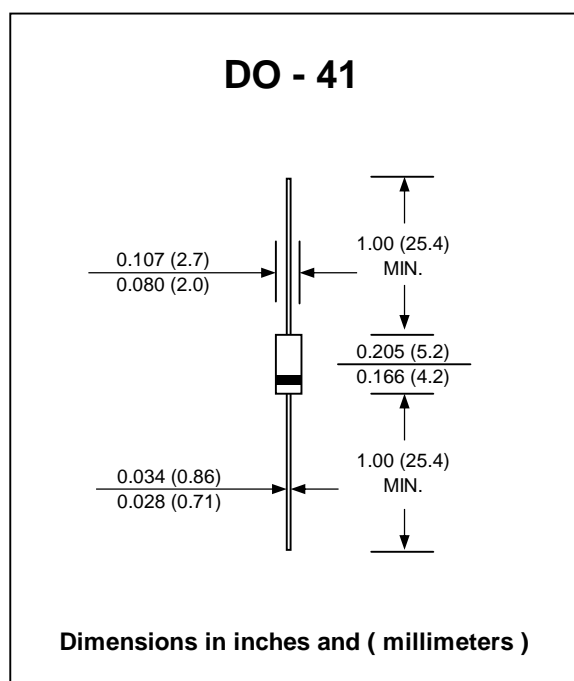
## FEATURES :

- \* High current capability
- \* High surge current capability
- \* High reliability
- \* Low reverse current
- \* Low forward voltage drop
- \* **Pb / RoHS Free**

## MECHANICAL DATA :

- \* Case : DO-41 Molded plastic
- \* Epoxy : UL94V-O rate flame retardant
- \* Lead : Axial lead solderable per MIL-STD-202, Method 208 guaranteed
- \* Polarity : Color band denotes cathode end
- \* Mounting position : Any
- \* Weight : 0.34 gram

## HIGH VOLTAGE RECTIFIER DIODES



## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25 °C ambient temperature unless otherwise specified.

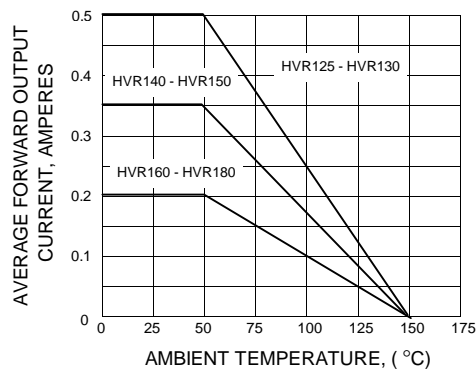
Single phase, half wave, 60 Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

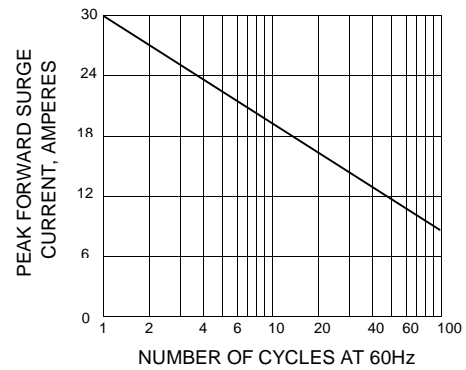
RATING	SYMBOL	HVR 125	HVR 130	HVR 140	HVR 150	HVR 160	HVR 170	HVR 180	UNIT	
Maximum Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	2500	3000	4000	5000	6000	7000	8000	V	
Maximum RMS Voltage	V <sub>RMS</sub>	1750	2100	2800	3500	4200	4900	5600	V	
Maximum DC Blocking Voltage	V <sub>DC</sub>	2500	3000	4000	5000	6000	7000	8000	V	
Maximum Average Forward Current Ta = 50°C	I <sub>F(AV)</sub>	0.5		0.3		0.2			A	
Maximum Peak Forward Surge Current 8.3ms Single half sine wave Superimposed on rated load (JEDEC Method)	I <sub>FSM</sub>	30								A
Maximum Peak Forward Voltage at I <sub>F</sub> = 1.0 A	V <sub>F</sub>	3.3		5.0		8.0			V	
Maximum DC Reverse Current Ta = 25°C at Rated DC Blocking Voltage Ta = 100°C	I <sub>R</sub>	5.0								μA
	I <sub>R(H)</sub>	50								μA
Junction Temperature Range	T <sub>J</sub>	- 40 to + 150								°C
Storage Temperature Range	T <sub>STG</sub>	- 40 to + 150								°C

## RATING AND CHARACTERISTIC CURVES ( HVR125 - HVR180 )

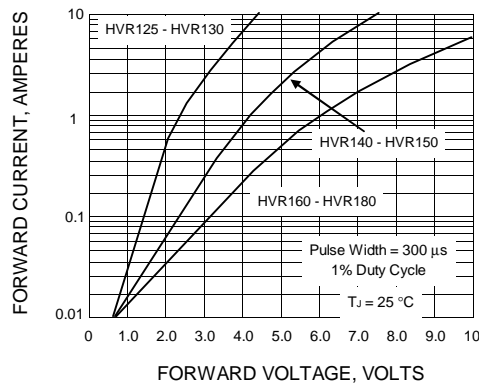
**FIG.1 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT**



**FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT**



**FIG.3 - TYPICAL FORWARD CHARACTERISTICS**



**FIG.4 - TYPICAL REVERSE CHARACTERISTICS**

