



# HVR512 - HVR520

**PRV : 1200 - 2000 Volts**

**Io : 5.0 Amperes**

## FEATURES :

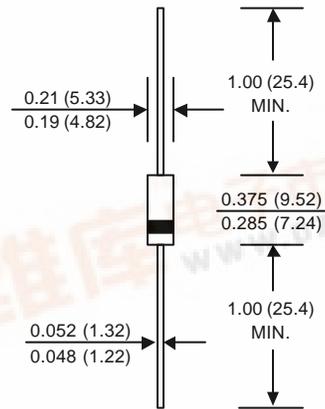
- \* High current capability
- \* High surge current capability
- \* High reliability
- \* Low reverse current
- \* Low forward voltage drop

## MECHANICAL DATA :

- \* Case : DO-201AD 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 : 1.21 grams

## HIGH VOLTAGE RECTIFIER DIODES

### DO-201AD



Dimensions in inches and ( millimeters )

## 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	HVR512	HVR514	HVR516	HVR518	HVR520	UNIT
Maximum Repetitive Peak Reverse Voltage	VRRM	1200	1400	1600	1800	2000	Volts
Maximum RMS Voltage	VRMS	840	980	1120	1260	1400	Volts
Maximum DC Blocking Voltage	VDC	1200	1400	1600	1800	2000	Volts
Maximum Average Forward Current Ta = 50°C	IF(AV)	5.0					Amps.
Peak Forward Surge Current 8.3ms Single half sine wave Superimposed on rated load (JEDEC Method)	IFSM	200					Amps.
Maximum Peak Forward Voltage at If = 5.0 Amps.	VF	2.2					Volts
Maximum DC Reverse Current Ta = 25°C	IR	10					µA
at Rated DC Blocking Voltage Ta = 100°C	IR(H)	100					µA
Typical Junction Capacitance (Note 1)	Cj	36					pF
Typical Thermal Resistance (Note 2)	RθJA	26					°C/W
Junction Temperature Range	TJ	- 40 to + 150					°C
Storage Temperature Range	TSTG	- 40 to + 150					°C

(1) Measured at 1.0 MHz and applied reverse voltage of 4.0VDC

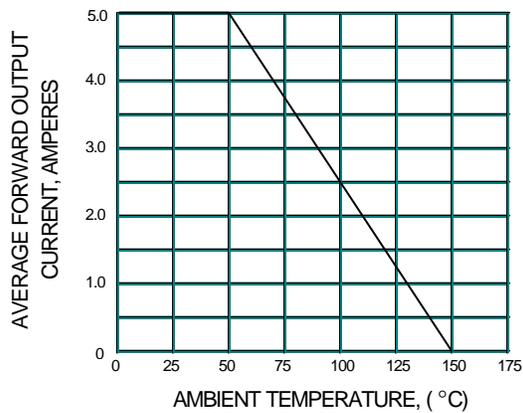
(2) Thermal resistance from Junction to Ambient at 0.375" (9.5mm) Lead Lengths, P.C. Board Mounted.



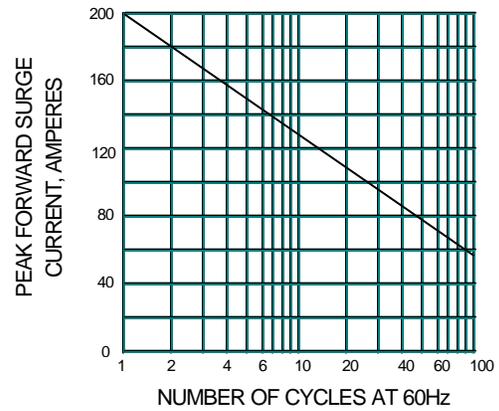


## RATING AND CHARACTERISTIC CURVES ( HVR512 - HVR520 )

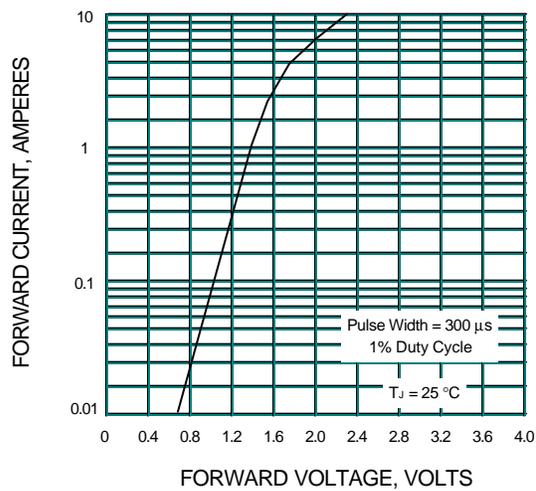
**FIG.1 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT**



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



**FIG.3 - TYPICAL FORWARD CHARACTERISTICS**



**FIG.4 - TYPICAL REVERSE CHARACTERISTICS**

