

# HVR512 - HVR520

**PRV : 1200 - 2000 Volts**

**Io : 5.0 Amperes**

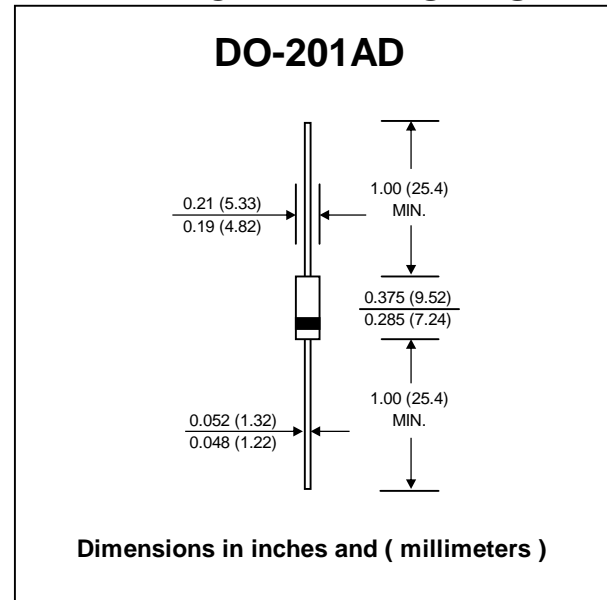
## FEATURES :

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

## 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 : 1.16 grams

## 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	HVR512	HVR514	HVR516	HVR518	HVR520	UNIT
Maximum Repetitive Peak Reverse Voltage	VRRM	1200	1400	1600	1800	2000	V
Maximum RMS Voltage	VRMS	840	980	1120	1260	1400	V
Maximum DC Blocking Voltage	VDC	1200	1400	1600	1800	2000	V
Maximum Average Forward Current Ta = 50°C	IF(AV)	5.0					A
Maximum Peak Forward Surge Current 8.3ms Single half sine wave Superimposed on rated load (JEDEC Method)	IFSM	200					A
Maximum Peak Forward Voltage at If = 5.0 A	VF	2.2					V
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

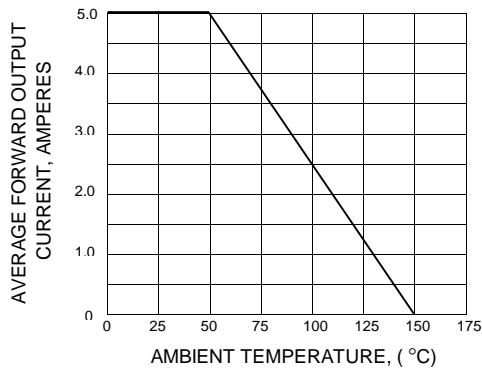
### Notes :

- (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.

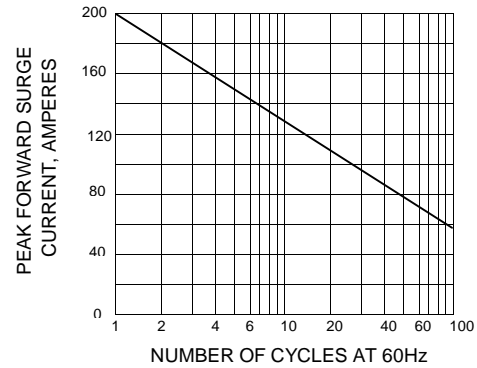


**RATING AND CHARACTERISTIC CURVES ( HVR512 - HVR520 )**

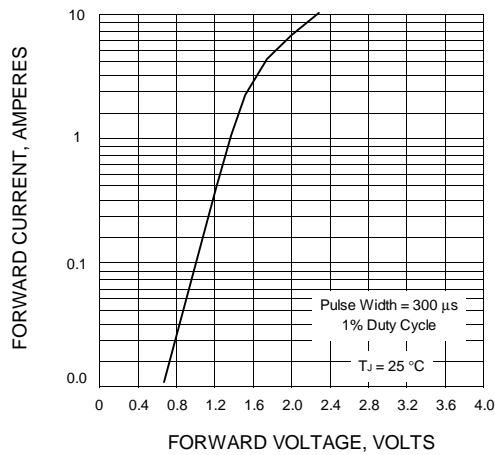
**FIG.1 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT**



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



**FIG.3 - TYPICAL FORWARD CHARACTERISTICS**



**FIG.4 - TYPICAL REVERSE CHARACTERISTICS**

