

HVR512 - HVR520

HIGH VOLTAGE RECTIFIER DIODES

PRV : 1200 - 2000 Volts

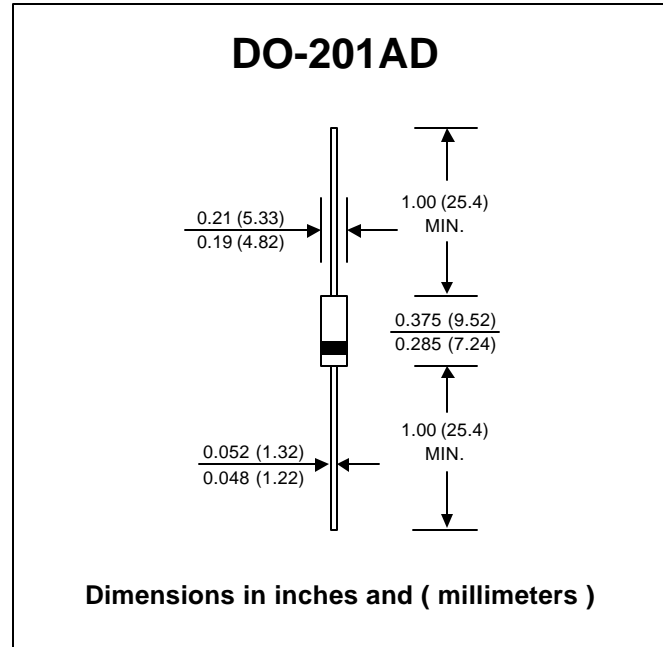
I_o : 5.0 Amperes

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



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	V _{RRM}	1200	1400	1600	1800	2000	Volts
Maximum RMS Voltage	V _{RMS}	840	980	1120	1260	1400	Volts
Maximum DC Blocking Voltage	V _{DC}	1200	1400	1600	1800	2000	Volts
Maximum Average Forward Current Ta = 50°C	I _{F(AV)}	5.0					Amps.
Peak Forward Surge Current 8.3ms Single half sine wave Superimposed on rated load (JEDEC Method)	I _{FSM}	200					Amps.
Maximum Peak Forward Voltage at I _F = 5.0 Amps.	V _F	2.2					Volts
Maximum DC Reverse Current Ta = 25°C at Rated DC Blocking Voltage Ta = 100°C	I _R	10					µA
	I _{R(H)}	100					µA
Typical Junction Capacitance (Note 1)	C _j	36					pF
Typical Thermal Resistance (Note 2)	R _{θJA}	26					°C/W
Junction Temperature Range	T _J	- 40 to + 150					°C
Storage Temperature Range	T _{STG}	- 40 to + 150					°C

Notes :

- (1) Measured at 1.0 MHz and applied reverse voltage of 4.0V_{DC}
- (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

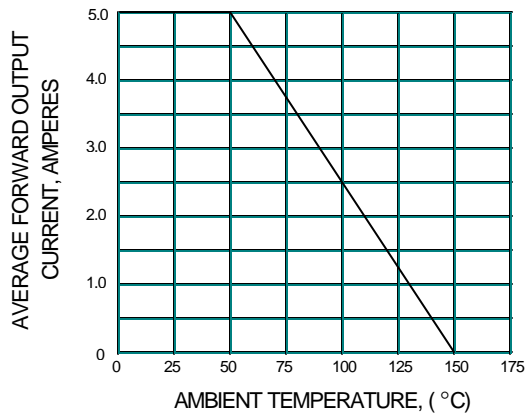


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

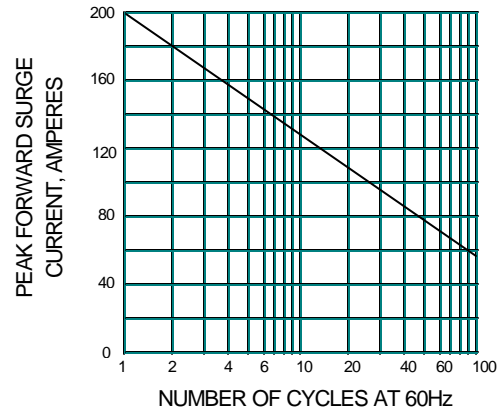


FIG.3 - TYPICAL FORWARD CHARACTERISTICS

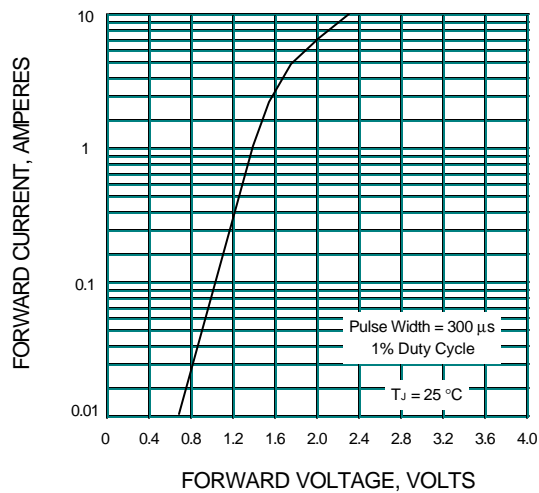


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

