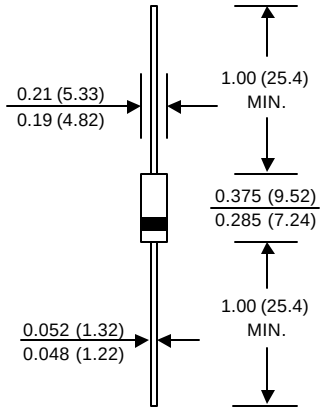
HVR312 - HVR320

HIGH VOLTAGE RECTIFIER DIODES

PRV : 1200 - 2000 Volts
Io : 3.0 Amperes

DO-201AD



Dimensions in inches and (millimeters)

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	HVR312	HVR314	HVR316	HVR318	HVR320	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	$I_{F(AV)}$	3.0					Amps.
Peak Forward Surge Current 8.3ms Single half sine wave Superimposed on rated load (JEDEC Method)	I_{FSM}	100					Amps.
Maximum Peak Forward Voltage at I_F = 3.0 Amps.	V_F	2.2					Volts
Maximum DC Reverse Current	I_R	10					µA
Typical Junction Capacitance (Note 1)	Cj	36					pF
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	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.

UPDATE : AUGUST 1. 1998

RATING AND CHARACTERISTIC CURVES (HVR312 - HVR320)

FIG.1 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

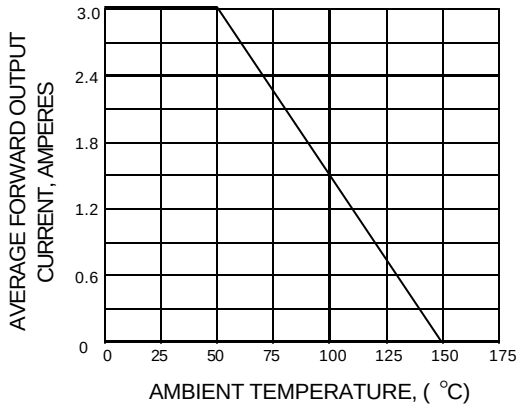


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

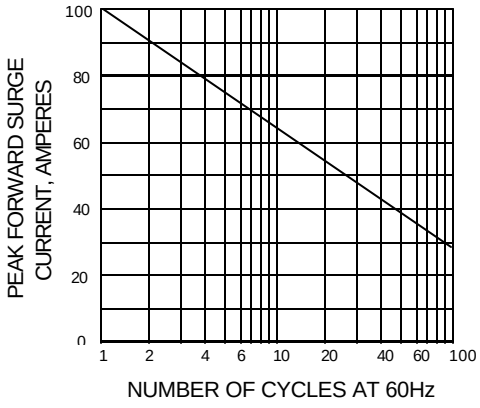


FIG.3 - TYPICAL FORWARD CHARACTERISTICS

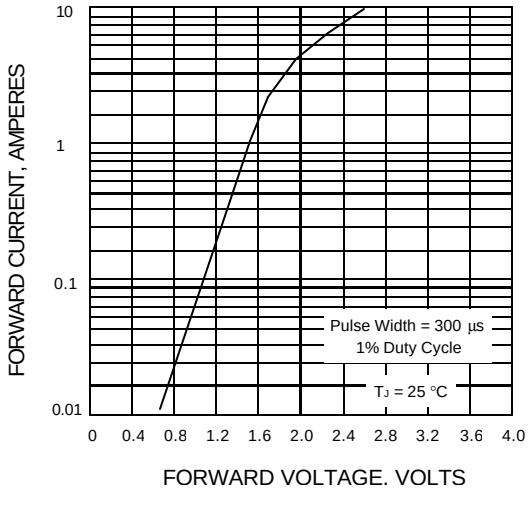


FIG.4 - TYPICAL REVERSE CHARACTERISTICS