

HVR125 - HVR180

PRV : 2500 - 8000 Volts

Io : 0.2 - 0.5 Ampere

FEATURES :

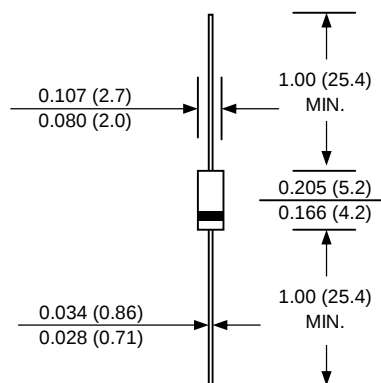
- * Glass passivated chip
- * High current capability
- * High surge current capability
- * High reliability
- * Low reverse current
- * Low forward voltage drop
- * Pb / RoHS Free

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

DO - 41



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	HVR 125	HVR 130	HVR 140	HVR 150	HVR 160	HVR 170	HVR 180	UNIT
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	2500	3000	4000	5000	6000	7000	8000	V
Maximum RMS Voltage	V _{RMS}	1750	2100	2800	3500	4200	4900	5600	V
Maximum DC Blocking Voltage	V _{DC}	2500	3000	4000	5000	6000	7000	8000	V
Maximum Average Forward Current Ta = 50°C	I _{F(AV)}	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 _{FSM}	30							A
Maximum Peak Forward Voltage at I _F = 1.0 A	V _F	3.3		5.0		8.0			V
Maximum DC Reverse Current Ta = 25°C at Rated DC Blocking Voltage Ta = 100°C	I _R	5.0							μA
	I _{R(H)}	50							μA
Junction Temperature Range	T _J	- 40 to + 150							°C
Storage Temperature Range	T _{STG}	- 40 to + 150							°C

RATING AND CHARACTERISTIC CURVES (HVR125 - HVR180)

FIG.1 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

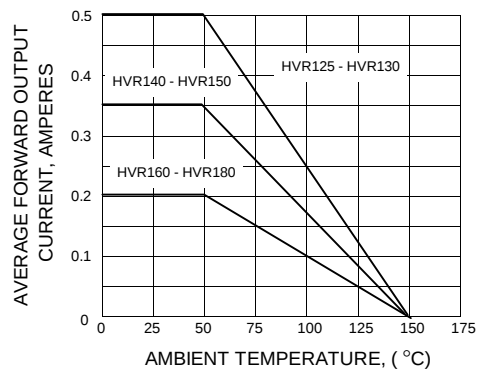


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

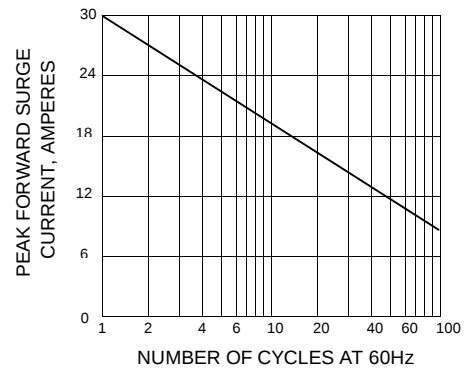


FIG.3 - TYPICAL FORWARD CHARACTERISTICS

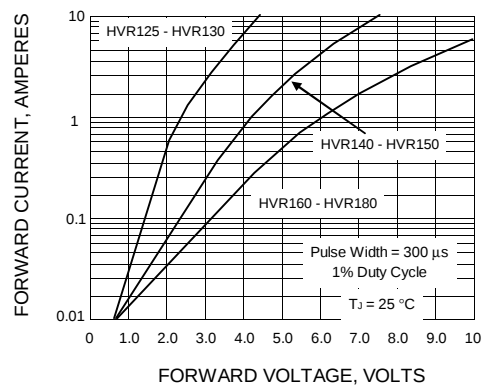


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

