

# HVR230 - HVR250

**PRV : 3000 - 5000 Volts**

**Io : 0.5 ~ 1.0 Amp**

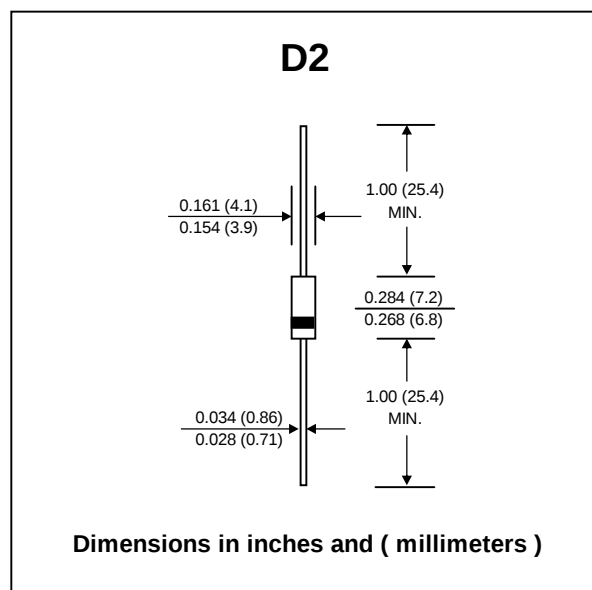
## FEATURES :

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

## MECHANICAL DATA :

- \* Case : D2 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 : 0.465 gram

## HIGH VOLTAGE RECTIFIER DIODES



## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25 °C ambient temperature unless otherwise specified.

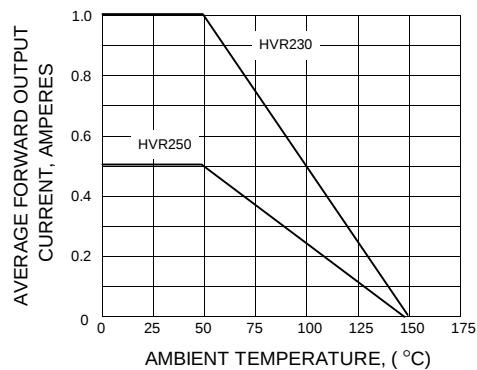
Single phase, half wave, 60 Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

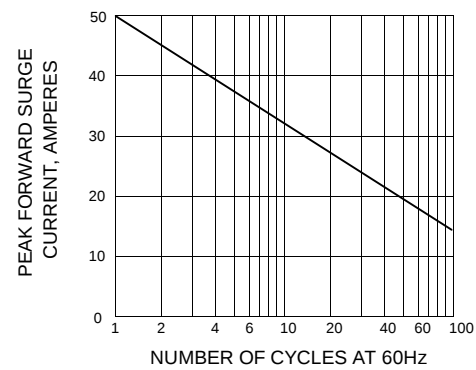
| RATING                                                                                                         | SYMBOL | HVR230        | HVR250 | UNIT |
|----------------------------------------------------------------------------------------------------------------|--------|---------------|--------|------|
| Maximum Repetitive Peak Reverse Voltage                                                                        | VRRM   | 3000          | 5000   | V    |
| Maximum RMS Voltage                                                                                            | VRMS   | 2100          | 3500   | V    |
| Maximum DC Blocking Voltage                                                                                    | VDC    | 3000          | 5000   | V    |
| Maximum Average Forward Current Ta = 50°C                                                                      | IF(AV) | 1.0           | 0.5    | A    |
| Maximum Peak Forward Surge Current<br>8.3ms Single half sine wave Superimposed<br>on rated load (JEDEC Method) | IFSM   | 50            |        | A    |
| Maximum Peak Forward Voltage at IF = 1.0 A                                                                     | VF     | 3.0           | 5.0    | V    |
| Maximum DC Reverse Current Tj = 25°C                                                                           | IR     | 5.0           |        | μA   |
| at Rated DC Blocking Voltage Tj = 100°C                                                                        | IR(H)  | 100           |        | μA   |
| Junction Temperature Range                                                                                     | TJ     | - 40 to + 150 |        | °C   |
| Storage Temperature Range                                                                                      | TSTG   | - 40 to + 150 |        | °C   |

## RATING AND CHARACTERISTIC CURVES ( HVR230 - HVR250 )

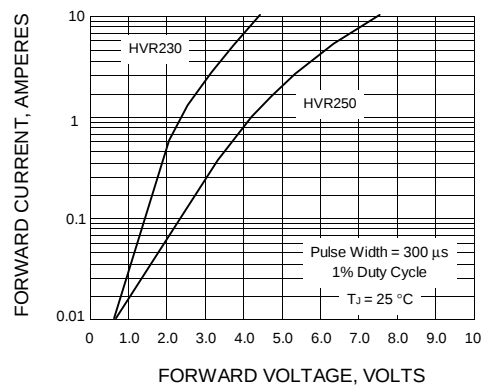
**FIG.1 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT**



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



**FIG.3 - TYPICAL FORWARD CHARACTERISTICS**



**FIG.4 - TYPICAL REVERSE CHARACTERISTICS**

