

HVR230 - HVR250

PRV : 3000 - 5000 Volts
Io : 0.5 ~ 1.0 Amp

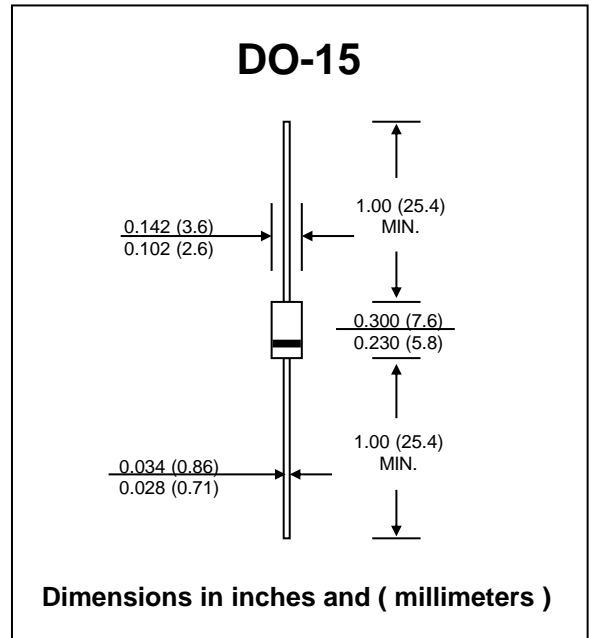
FEATURES :

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

MECHANICAL DATA :

- * Case : DO-15 Molded plastic
- * Epoxy : UL94V-0 rate flame retardant
- * Lead : Axial lead solderable per MIL-STD-202, Method 208 guaranteed
- * Polarity : Color band denotes cathode end
- * Mounting position : Any
- * Weight : 0.4 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 | V_{RRM} | 3000 | 5000 | V |
| Maximum RMS Voltage | V_{RMS} | 2100 | 3500 | V |
| Maximum DC Blocking Voltage | V_{DC} | 3000 | 5000 | V |
| Maximum Average Forward Current $T_a = 50\text{ }^\circ\text{C}$ | $I_{F(AV)}$ | 1.0 | 0.5 | A |
| Maximum Peak Forward Surge Current 8.3ms Single half sine wave Superimposed on rated load (JEDEC Method) | I_{FSM} | 50 | | A |
| Maximum Peak Forward Voltage at $I_F = 1.0\text{ A}$ | V_F | 2.5 | 4 | V |
| Maximum DC Reverse Current $T_j = 25\text{ }^\circ\text{C}$ at Rated DC Blocking Voltage $T_j = 100\text{ }^\circ\text{C}$ | I_R | 5.0 | | μA |
| | $I_{R(H)}$ | 100 | | μA |
| Junction Temperature Range | T_J | - 40 to + 150 | | $^\circ\text{C}$ |
| Storage Temperature Range | T_{STG} | - 40 to + 150 | | $^\circ\text{C}$ |

RATING AND CHARACTERISTIC CURVES (HVR230 - HVR250)

FIG.1 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

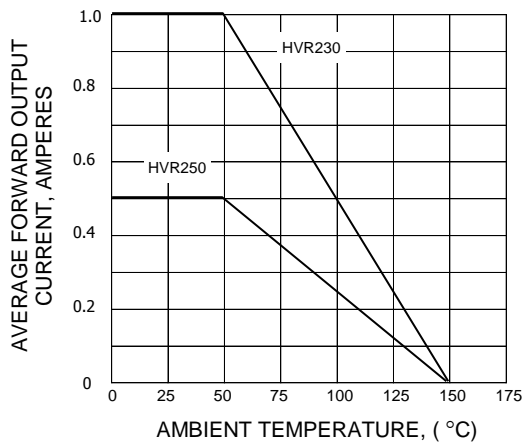


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

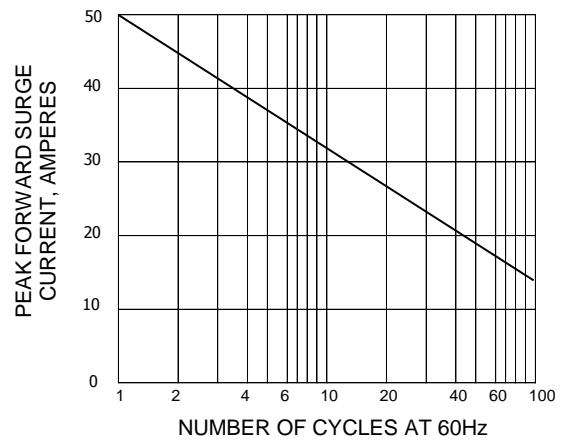


FIG.3 - TYPICAL FORWARD CHARACTERISTICS

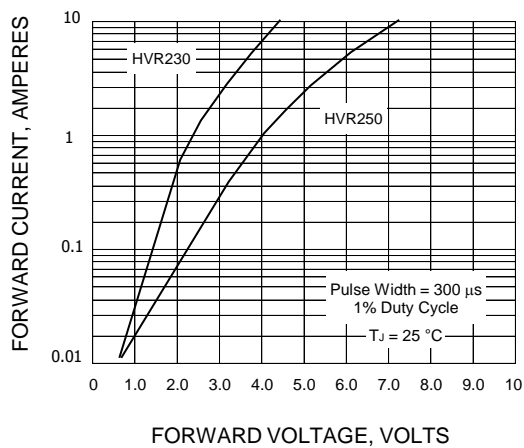


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

