

# HVR612G

**PRV : 1200 Volts**

**Io : 6 Amperes**

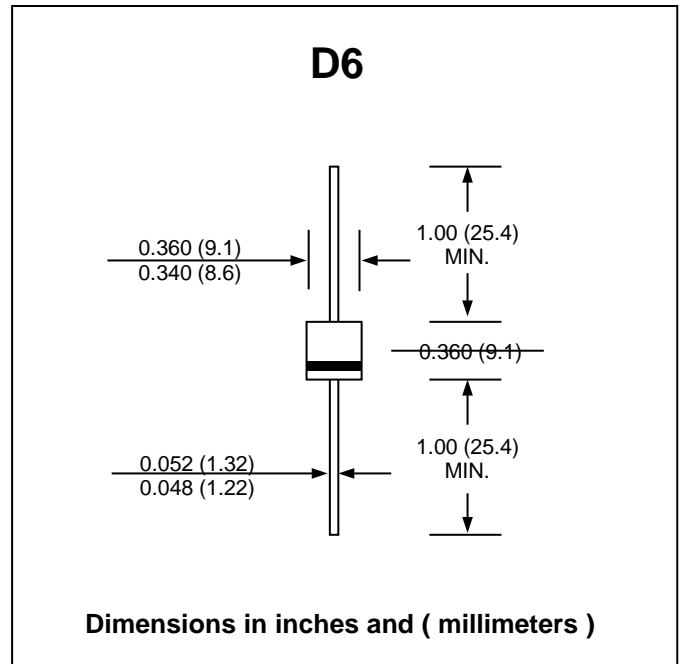
## FEATURES :

- \* 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 : Void-free molded plastic body
- \* 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 : 2.1 grams

## GLASS PASSIVATED JUNCTION HIGH VOLTAGE RECTIFIERS



## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25 °C ambient temperature unless otherwise specified.

RATING	SYMBOL	VALUE	UNIT
Maximum Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	1200	V
Maximum RMS Voltage	V <sub>RMS</sub>	840	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	1200	V
Maximum Average Forward Current 0.375"(9.5mm) Lead Length Ta = 60 °C	I <sub>F(AV)</sub>	6.0	A
Non - Repetitive Peak Forward Surge Current 8.3ms Single half sine wave Superimposed on rated load (JEDEC Method)	I <sub>FSM</sub>	300	A
Maximum Instantaneous Forward Voltage at I <sub>F</sub> = 6 A	V <sub>F</sub>	1.0	V
Maximum DC Reverse Current at rated DC Blocking Voltage	Ta = 25 °C I <sub>R</sub>	5.0	μA
	Ta = 100 °C I <sub>R(H)</sub>	1.0	mA
Typical Junction Capacitance (Note 2)	C <sub>J</sub>	150	pF
Typical Thermal Resistance Junction to Ambient (Note1)	R <sub>θJA</sub>	20	°C/W
Junction Temperature Range	T <sub>J</sub>	- 50 to + 150	°C
Storage Temperature Range	T <sub>STG</sub>	- 50 to + 150	°C

### Notes :

- (1) Thermal resistance from junction to ambient and from junction to lead at 0.375" (9.5mm) lead length,
- (2) Measured at 1.0 MHz and applied reverse voltage of 4.0 VDC



### RATING AND CHARACTERISTIC CURVES ( HVR612G )

FIG.1 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

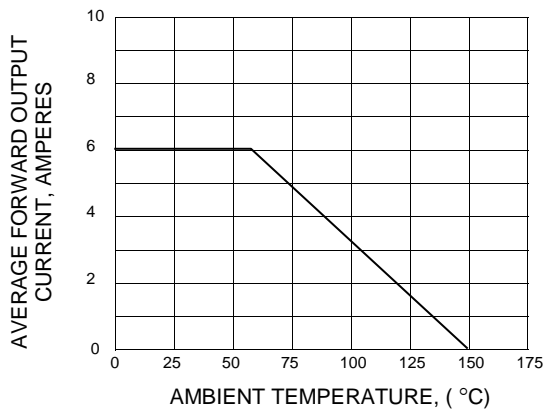


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

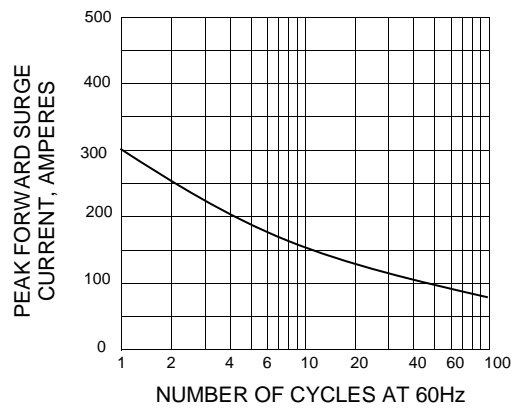


FIG.3 - TYPICAL FORWARD CHARACTERISTICS

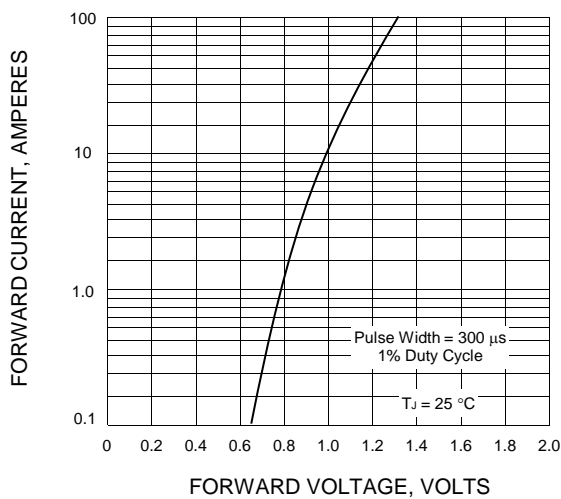


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

