

HER612

PRV : 1200 Volts
Io : 6.0 Amperes

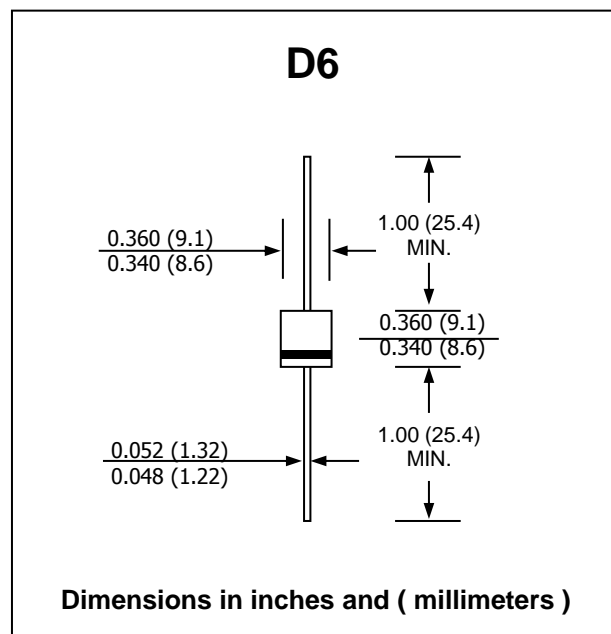
FEATURES :

- * High surge current capability
- * Low leakage current
- * Forward voltage drop
- * Low power loss
- * High efficiency
- * 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

HIGH EFFICIENT 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	VALUE	UNIT
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	1200	V
Maximum RMS Voltage	V_{RMS}	840	V
Maximum DC Blocking Voltage	V_{DC}	1200	V
Maximum Average Forward Current 0.375"(9.5mm) Lead Length $T_a = 55\text{ }^\circ\text{C}$	$I_{F(AV)}$	6.0	A
Maximum Peak Forward Surge Current, 8.3ms Single half sine wave superimposed on rated load (JEDEC Method)	I_{FSM}	250	A
Maximum Forward Voltage at $I_F = 6.0\text{ A}$	V_F	3.4	V
Maximum DC Reverse Current $T_a = 25\text{ }^\circ\text{C}$ at Rated DC Blocking Voltage $T_a = 100\text{ }^\circ\text{C}$	I_R	10	μA
	$I_{R(H)}$	50	μA
Maximum Reverse Recovery Time (Note 1)	T_{rr}	75	ns
Typical Junction Capacitance (Note 2)	C_J	50	pF
Junction Temperature Range	T_J	- 65 to + 150	$^\circ\text{C}$
Storage Temperature Range	T_{STG}	- 65 to + 150	$^\circ\text{C}$

Notes :

- (1) Reverse Recovery Test Conditions : $I_F = 0.5\text{ A}$, $I_R = 1.0\text{ A}$, $I_{rr} = 0.25\text{ A}$.
- (2) Measured at 1.0 MHz and applied reverse voltage of 4.0 VDC

RATING AND CHARACTERISTIC CURVES (HER612)

FIG.1 - REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM

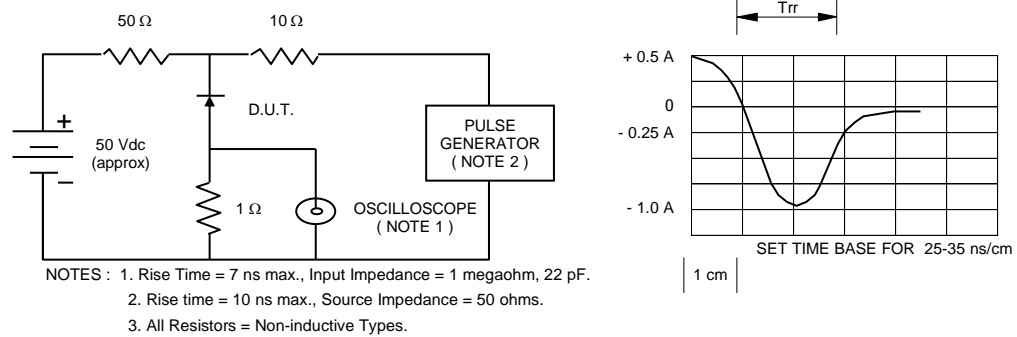


FIG.2 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

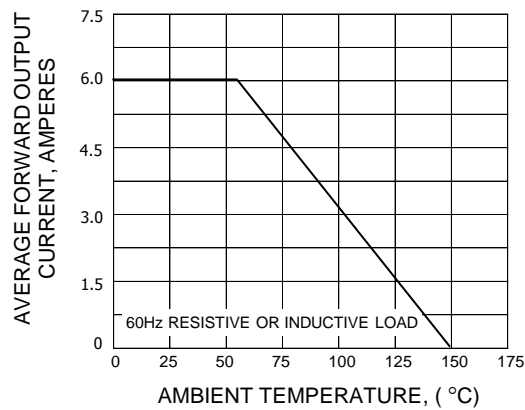


FIG.3 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

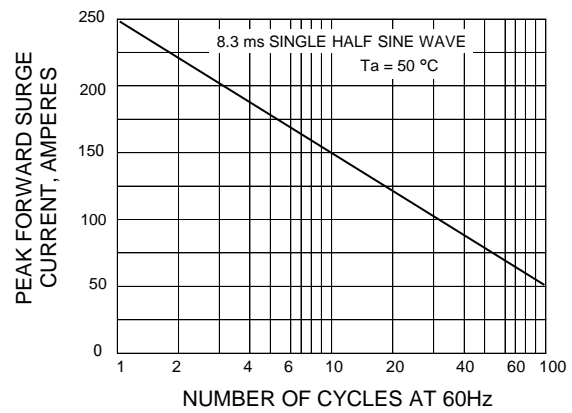


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

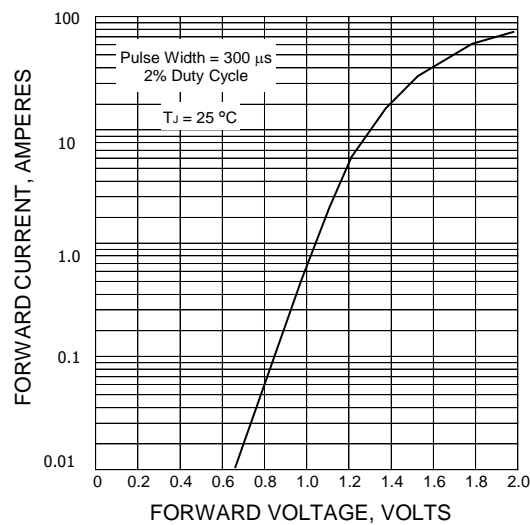


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

