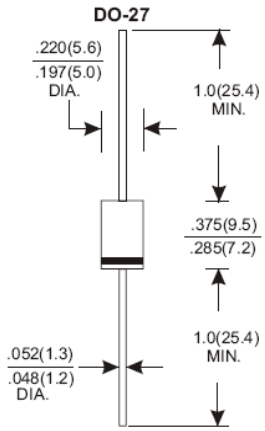
HER501G THRU HER508G

HIGH EFFICIENCY GLASS PASSIVATED RECTIFIERS

Reverse Voltage - 50 to 1000 Volts Forward Current - 5.0 Amperes



Dimensions in inches and (millimeters)

FEATURES

- Low forward voltage drop
- High current capability
- High reliability
- High surge current capability
- High speed switching

MECHANICAL DATA

Case: Molded plastic
Epoxy: UL 94V-0 rate flame retardant
Lead: Axial leads, solderable per MIL-STD-202, method 208 guaranteed.
Polarity: Color band denotes cathode end
Mounting Position: Any
Weight: 1.10 grams

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

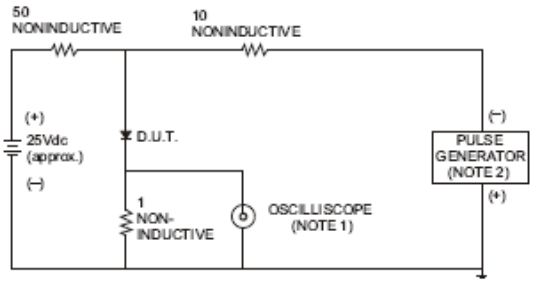
Ratings at 25°C ambient temperature unless otherwise specified.
Single phase half-wave 60Hz,resistive or inductive load,for capacitive load current derate by 20%.

	SYMBOLS	HER 501G	HER 502G	HER 503G	HER 504G	HER 505G	HER 506G	HER 507G	HER 508G	UNITS
Maximum recurrent peak reverse voltage	V_{RRM}	50	100	200	300	400	600	800	1000	VOLTS
Maximum RMS voltage	V_{RMS}	35	70	140	210	280	420	560	700	VOLTS
Maximum DC blocking voltage	V_{DC}	50	100	200	300	400	600	800	1000	VOLTS
Maximum average forward rectified current 0.375″(9.5mm) lead length at T_A=50°C	$I_{(AV)}$	5.0								Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	200.0								Amps
Maximum instantaneous forward voltage at 5.0A	V_F	1.0				1.3	1.85			Volts
Maximum DC reverse current T_A=25°C at rated DC blocking voltage T_A=100°C	I_R	10.0 200.0								μA
Maximum reverse recovery time (NOTE 1)	t_{rr}	50					70			ns
Typical junction capacitance (NOTE 2)	C_J	75								pF
Operating junction and storage temperature range	T_J,T_{STG}	-65 to +150								°C

Note:1.Reverse recovery condition I_F=0.5A,I_R=1.0A,Irr=0.25A
2.Measured at 1MHz and applied reverse voltage of 4.0V D.C.

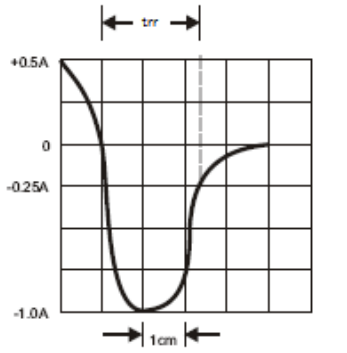
RATINGS AND CHARACTERISTIC CURVES HER501G THRU HER508G

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



NOTES: 1. Rise Time= 7ns max., Input Impedance= 1 megohm.22pF.

2. Rise Time= 10ns max., Source Impedance= 50 ohms.



SET TIME BASE FOR
50 / 10ns / cm

FIG.2-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

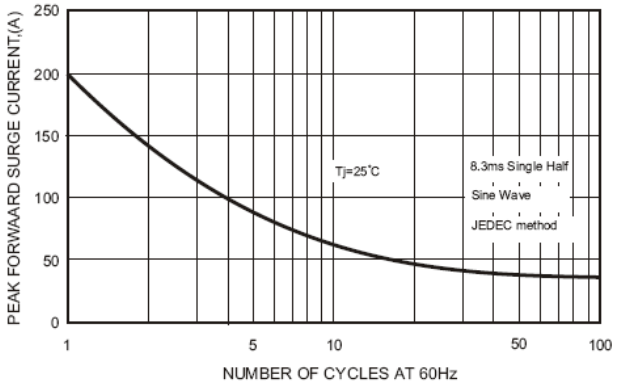


FIG.3-TYPICAL JUNCTION CAPACITANCE

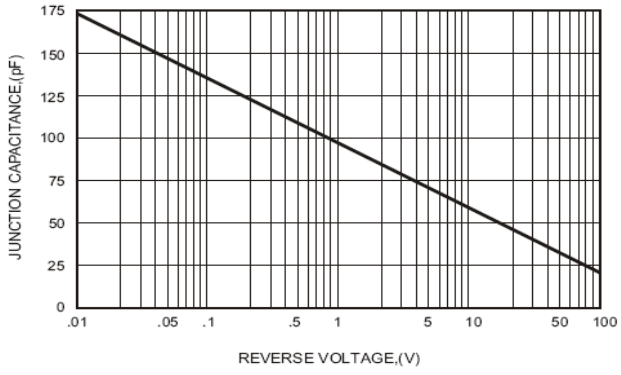


FIG.4-TYPICAL FORWARD CHARACTERISTICS

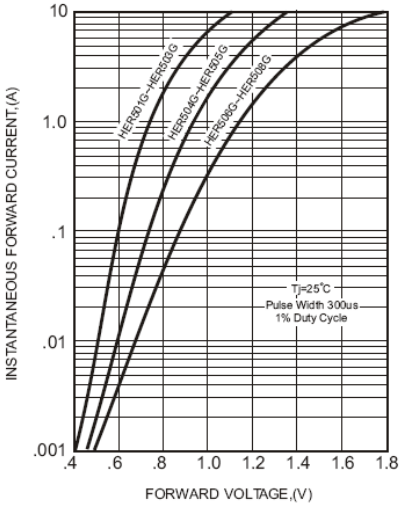
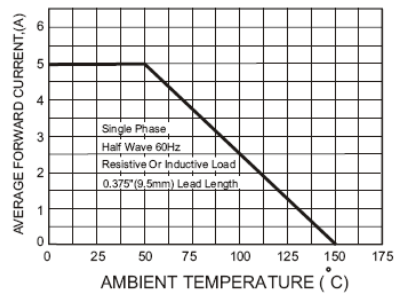


FIG.5-TYPICAL FORWARD CURRENT DERATING CURVE



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