

**GLASS PASSIVATED RECTIFIERS**

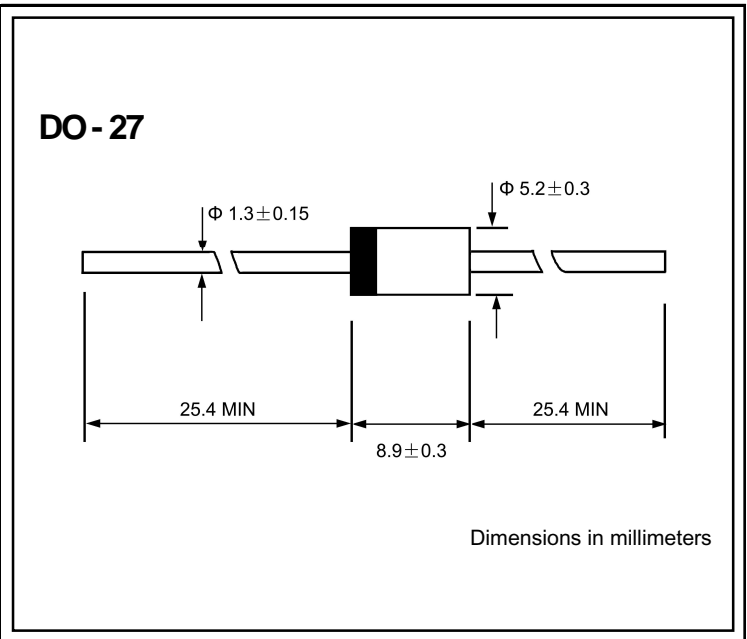
**VOLTAGE RANGE: 50 -- 1000 V**  
**CURRENT: 3.0 A**

**FEATURES**

- ◇ Low cost
- ◇ Glass passivated junction
- ◇ Low leakage
- ◇ Low forward voltage drop
- ◇ High current capability
- ◇ Easily cleaned with Freon, Alcohol, Isopropanol and similar solvents
- ◇ The plastic material carries U/L recognition 94V-0

**MECHANICAL DATA**

- ◇ Case: JEDEC DO-27, molded plastic
- ◇ Terminals: Axial lead, solderable per ML-STD-202, Method 208
- ◇ Polarity: Color band denotes cathode
- ◇ Weight: 0.041 ounces, 1.15 grams
- ◇ Mounting position: Any



**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60 Hz, resistive or inductive load. For capacitive load, derate by 20%.

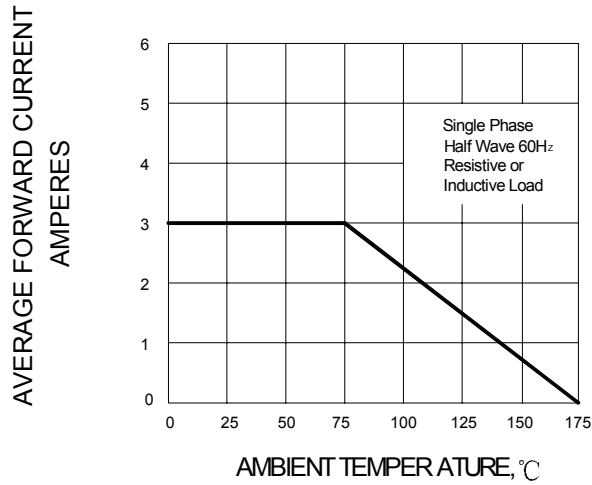
		HER 301G	HER 302G	HER 303G	HER 304G	HER 305G	HER 306G	HER 307G	HER 308G	UNITS
Maximum recurrent peak reverse voltage	$V_{RRM}$	50	100	200	300	400	600	800	1000	V
Maximum RMS voltage	$V_{RMS}$	35	70	140	210	280	420	560	700	V
Maximum DC blocking voltage	$V_{DC}$	50	100	200	300	400	600	800	1000	V
Maximum average forward rectified current 9.5mm lead length, @ $T_A=75^\circ C$	$I_{F(AV)}$	3.0								A
Peak forward surge current 8.3ms single half-sine-wave superimposed on rated load @ $T_J=125^\circ C$	$I_{FSM}$	200.0					150.0			A
Maximum instantaneous forward voltage @3.0 A	$V_F$	1.0		1.3		1.7			V	
Maximum reverse current @ $T_A=25^\circ C$ at rated DC blocking voltage @ $T_A=100^\circ C$	$I_R$	10.0					150.0			$\mu A$
Maximum reverse capacitance (Note1)	$t_{rr}$	50					75			ns
Typical junction capacitance (Note2)	$C_J$	70					50			pF
Typical thermal resistance (Note3)	$R_{\theta JA}$	30.0								$^\circ C/W$
Operating junction temperature range	$T_J$	- 55 --- + 175								$^\circ C$
Storage temperature range	$T_{STG}$	- 55 --- + 175								$^\circ C$

NOTE: 1. Measured with  $I_F=0.5A$ ,  $I_R=1A$ ,  $I_{rr}=0.25A$ .

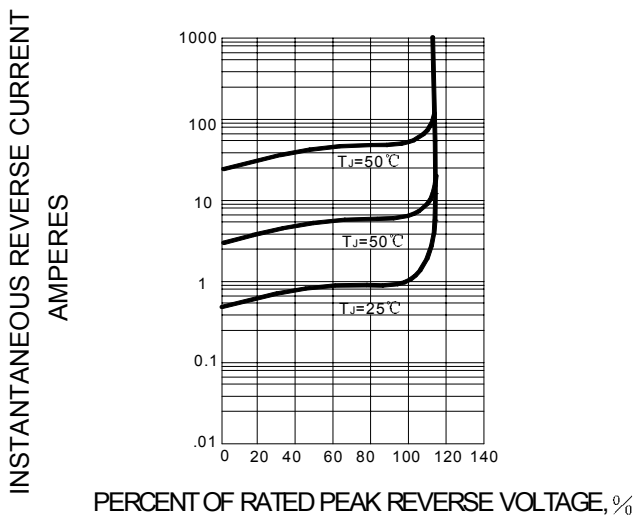
2. Measured at 1.0MHz and applied reverse voltage of 4.0V

3. Thermal resistance from junction to ambient.

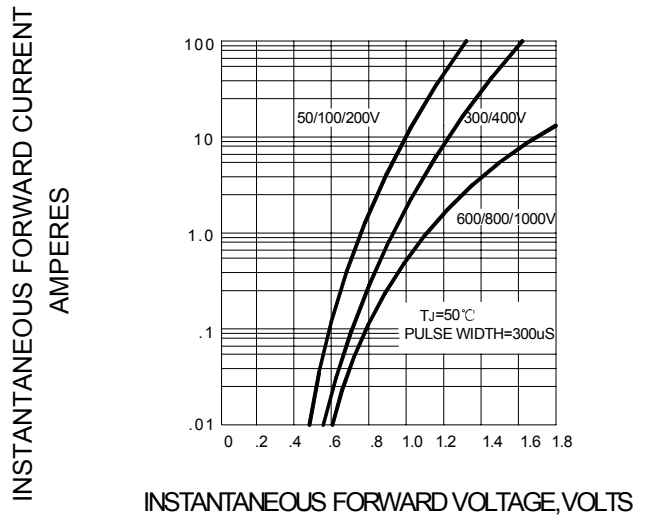
**FIG.1 –FORWARD DERATING CURVE**



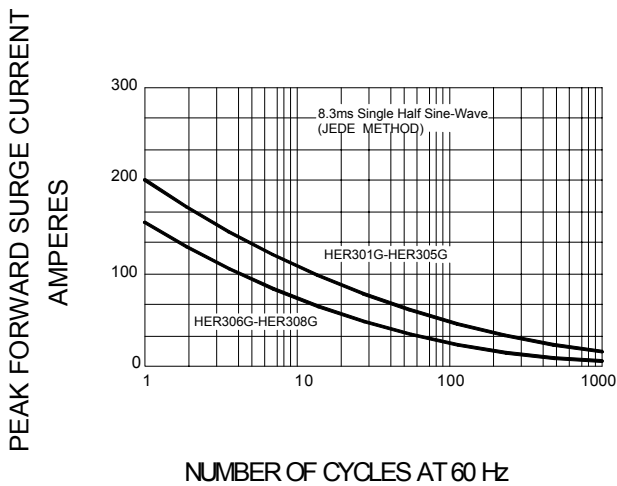
**FIG.2 –TYPICAL REVERSE CHARACTERISTICS**



**FIG.3-TYPICAL FORWARD CHARACTERISTICS**



**FIG.4-PEAK FORWARD SURGE CURRENT**



**FIG.5-TYPICAL JUNCTION CAPACITANCE**

