

## HER303G THRU HER308G

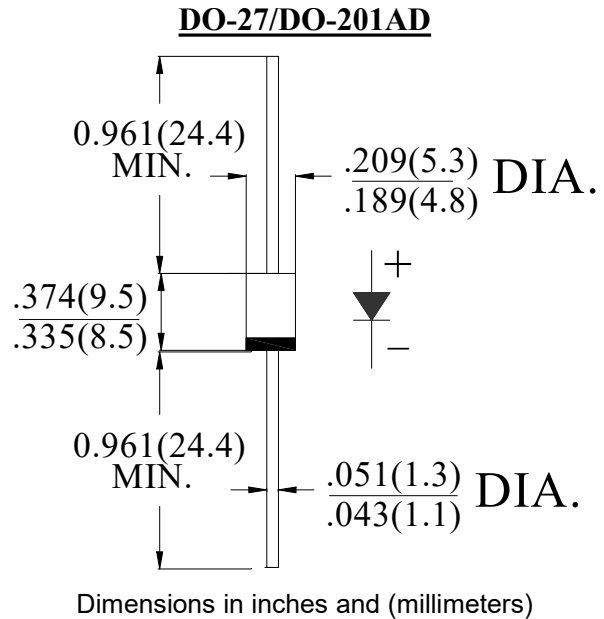
### 3.0AMPS. GLASS PASSIVATED HIGH EFFICIENT RECTIFIERS

#### FEATURE

- . Low leakage
- . Low forward voltage drop
- . High current capability
- . High surge capability
- . High reliability
- . High temperature soldering guaranteed  
260°C /10sec / 0.375" lead length at 5 lbs tension

#### MECHANICAL DATA

- . Terminal: Plated axial leads solderable per MIL-STD 202E, method 208C
- . Case: Molded with UL-94 Class V-0 recognized Flame Retardant Epoxy
- . Polarity: color band denotes cathode
- . Mounting position: any



#### 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, derate current by 20%

Type Number	SYM BOL	HER303G	HER304G	HER305G	HER308G	units
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	200	300	400	1000	V
Maximum RMS Voltage	$V_{RMS}$	140	210	280	700	V
Maximum DC blocking Voltage	$V_{DC}$	200	300	400	1000	V
Maximum Average Forward Rectified Current .375"(9.5mm) lead length	$I_{F(AV)}$	3.0				A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	$I_{FSM}$	90				A
Maximum forward Voltage at 3.0A DC	$V_F$	1.0	1.3	1.7		V
Maximum DC Reverse Current @ $T_J=25^\circ\text{C}$ at rated DC blocking voltage @ $T_J=125^\circ\text{C}$	$I_R$		5.0 200.0			$\mu\text{A}$
Maximum Reverse Recovery Time (Note 1)	$t_{rr}$		50		75	nS
Typical Junction Capacitance (Note 2)	$C_J$		18		15	pF
Typical Thermal Resistance (Note 3)	$R_{(JA)}$		45			$^\circ\text{C/W}$
Storage Temperature	$T_{STG}$		-55 to +150			$^\circ\text{C}$
Operation Junction Temperature	$T_J$		-55 to +150			$^\circ\text{C}$

**Note:** 1. 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 4.0Vdc

3. Thermal Resistance from Junction to Ambient at 0.375" (9.5mm) lead length, vertical P.C.Board Mounted.

**RATING AND CHARACTERISTIC CURVES**

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

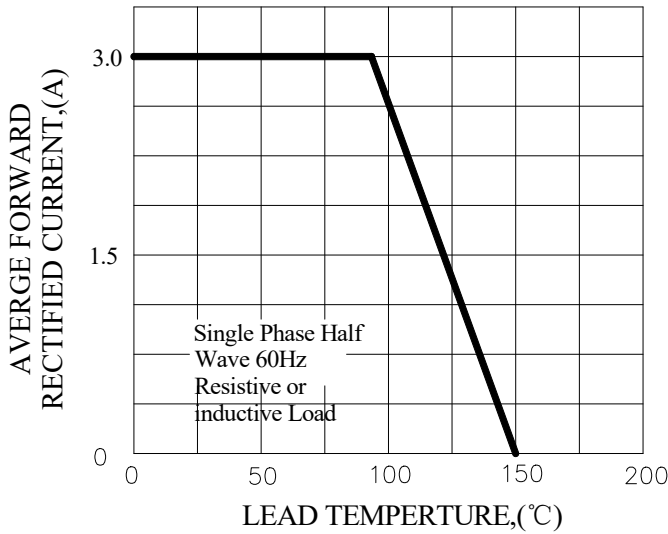


FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

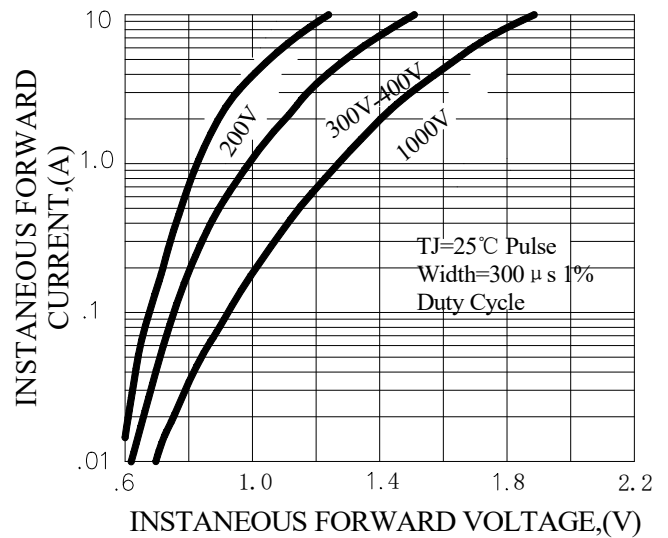


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

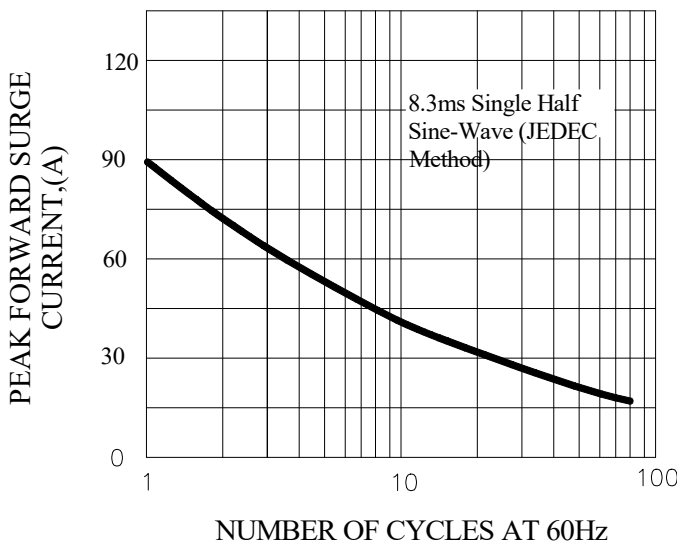


FIG.4-TYPICAL REVERSE CHARACTERISTICS

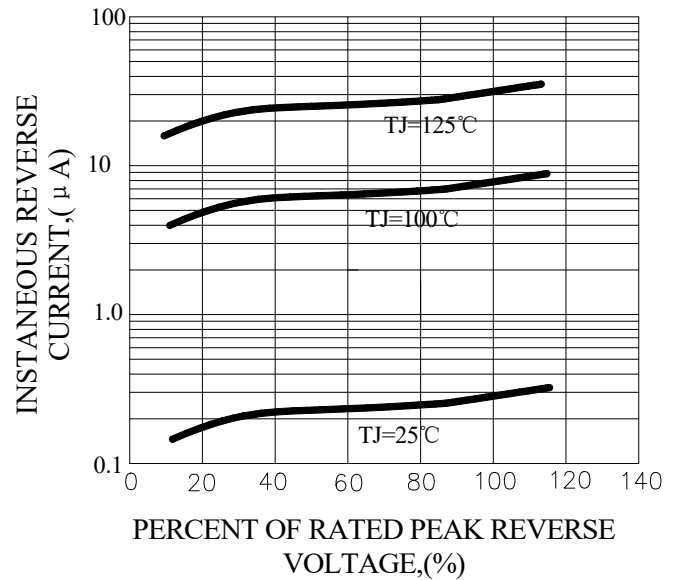
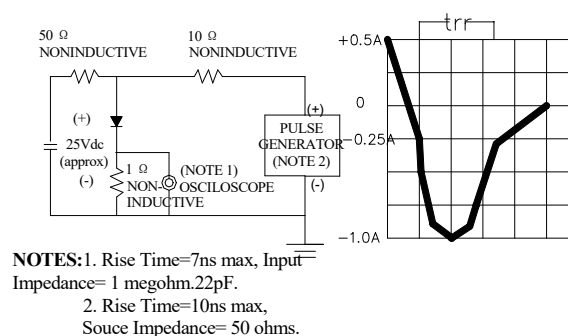
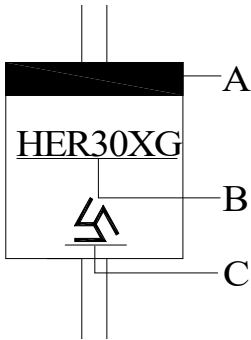


FIG.5-TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTIC



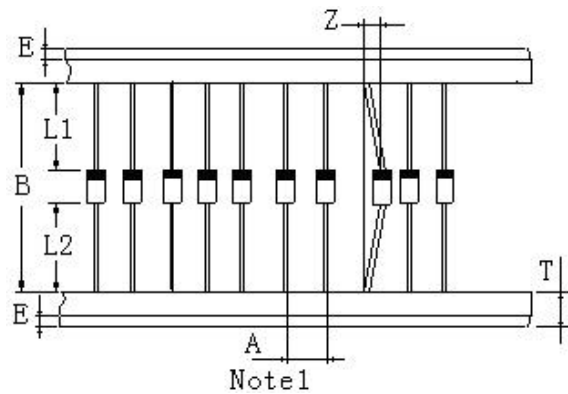
## Marking and packaging illustration

### 1、Marking



SYMBOL	Explanation
A	Color Band Denotes Cathode
B	Product Name
C	Trademark

### 2、Packaging



ITEM	SYMBOL	SPECIFICATIONS (mm)	SPECIFICATIONS (inch)
Component alignment	Z	1.2max	0.048max
Tape width	T	6.0±0.4	0.236±0.016
Exposed adhesive	E	0.8max	0.032max
Body eccentricity	L1-L2	1.0max	0.040max
Component	A	10.0±0.5	0.4±0.02
Inner tap	B	52.0~53.5	2.05~2.11

NOTE:

Each component lead shall be sandwiched between tapes for a minimum of 2.5mm (0.1inch)