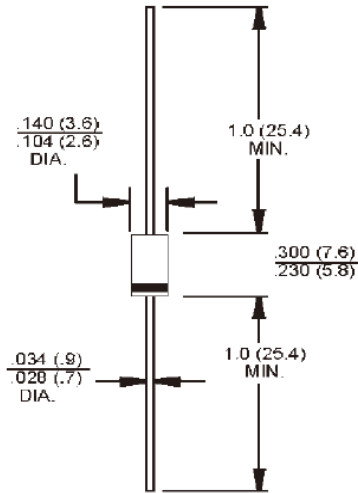


**Features**

- ✧ High efficiency, Low VF
- ✧ High current capability
- ✧ High reliability
- ✧ High surge current capability
- ✧ For use in low voltage, high frequency inverter, free wheeling, and polarity protection application
- ✧ Green compound with suffix "G" on packing code & prefix "G" on datecode

**Mechanical Data**

- ✧ Case: Molded plastic
- ✧ Epoxy: UL 94V-0 rate flame retardant
- ✧ Lead: Pure tin plated, lead free, solderable per MIL-STD-202, Method 208 guaranteed
- ✧ Polarity: Color band denotes cathode
- ✧ High temperature soldering guaranteed: 260 °C/10s / .375", (9.5mm) lead lengths at 5 lbs, (2.3kg) tension
- ✧ Weight: 0.40 grams



**Dimensions in inches and (millimeters)**

**Marking Diagram**



- HER20X = Specific Device Code
- G = Green Compound
- Y = Year
- WW = Work Week

**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%

Type Number	Symbol	HER 201	HER 202	HER 203	HER 204	HER 205	HER 206	HER 207	Unit
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	50	100	200	300	400	600	800	V
Maximum RMS Voltage	$V_{RMS}$	35	70	140	210	280	420	560	V
Maximum DC Blocking Voltage	$V_{DC}$	50	100	200	300	400	600	800	V
Maximum Average Forward Rectified Current .375 (9.5mm) Lead Length @ $T_A=55^{\circ}C$	$I_{F(AV)}$	2							A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	$I_{FSM}$	60							A
Maximum Instantaneous Forward Voltage (Note 1) @ 2 A	$V_F$	1.0			1.3		1.7		V
Maximum Reverse Current @ Rated VR $T_A=25^{\circ}C$ $T_A=125^{\circ}C$	$I_R$	5 150							uA
Maximum Reverse Recovery Time (Note 2)	$T_{rr}$	50					75		nS
Typical Junction Capacitance (Note 3)	$C_j$	50					35		pF
Typical Thermal Resistance	$R_{\theta JA}$ $R_{\theta JC}$	60 8							°C/W
Operating Temperature Range	$T_J$	- 65 to + 150							°C
Storage Temperature Range	$T_{STG}$	- 65 to + 150							°C

Note 1: Pulse Test with PW=300 usec, 1% Duty Cycle  
 Note 2: Reverse Recovery Test Conditions: IF=0.5A, IR=1.0A, IRR=0.25A  
 Note 3: Measured at 1 MHz and Applied Reverse Voltage of 4.0V D.C.

## RATINGS AND CHARACTERISTIC CURVES (HER201 THRU HER207)

FIG. 1 MAXIMUM FORWARD CURRENT DERATING CURVE

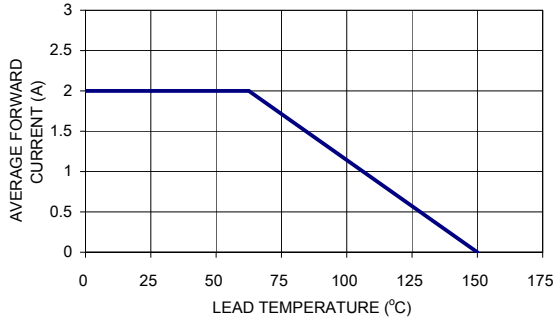


FIG. 2 TYPICAL REVERSE CHARACTERISTICS

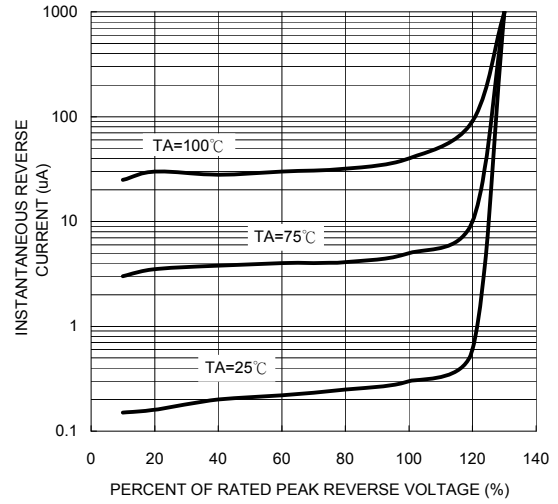


FIG. 3 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

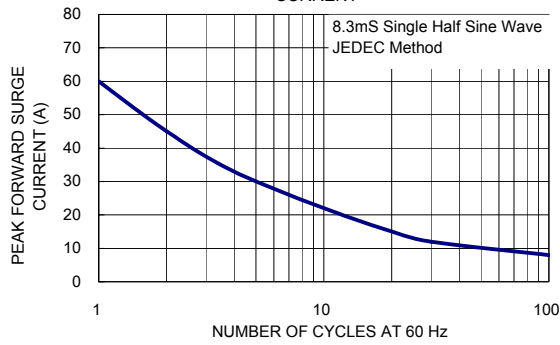


FIG. 5 TYPICAL FORWARD CHARACTERISTICS

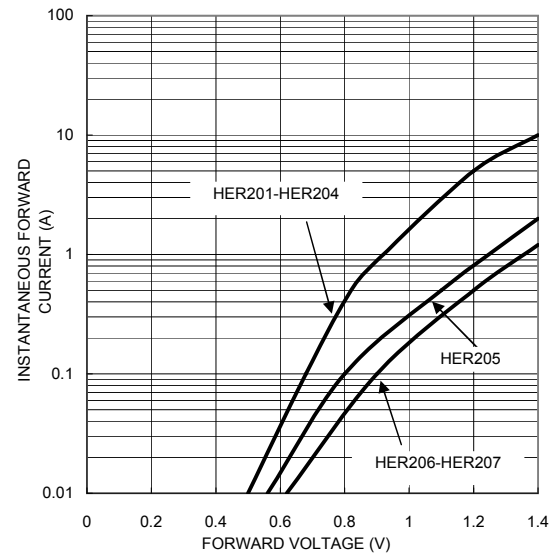


FIG. 4 TYPICAL JUNCTION CAPACITANCE

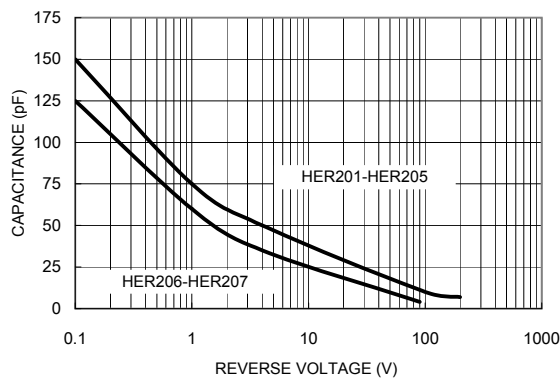


FIG. 6- REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM

