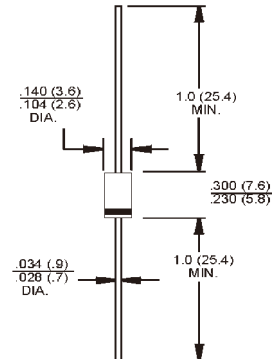


HER201 - HER208

2.0 AMPS. High Efficient Rectifiers

DO-15



Dimensions in inches and (millimeters)

Marking Diagram



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

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

- Cases: 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/10 seconds/.375", (9.5mm) lead lengths at 5 lbs., (2.3kg) tension
- Weight: 0.40grams

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	HER 208	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 .375 (9.5mm) lead length @T _A = 55 °C	I _{F(AV)}	2.0								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 @ 2.0A	V _F	1.0				1.3	1.7			V
Maximum DC Reverse Current at Rated DC Blocking Voltage @T _A =25 °C (Note 1) @ T _A =125 °C	I _R	5.0 150								uA uA
Maximum Reverse Recovery Time (Note 4)	T _{rr}	50					75			nS
Typical Junction Capacitance (Note 2)	C _j	50					35			pF
Typical Thermal Resistance (Note 3)	R _{θJA} R _{θJC}	60 8								°C/W
Operating Temperature Range	T _J	-65 to +150								°C
Storage Temperature Range	T _{STG}	-65 to +150								°C

- Notes: 1. Pulse Test with PW=300 usec, 1% Duty Cycle
2. Measured at 1 MHz and Applied Reverse Voltage of 4.0 V D.C.
3. Mount on Cu-Pad Size 10mm x 10mm on PCB.
4. Reverse Recovery Test Conditions: I_F=0.5A, I_R=1.0A, I_{RR}=0.25A

RATINGS AND CHARACTERISTIC CURVES (HER201 THRU HER208)

FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

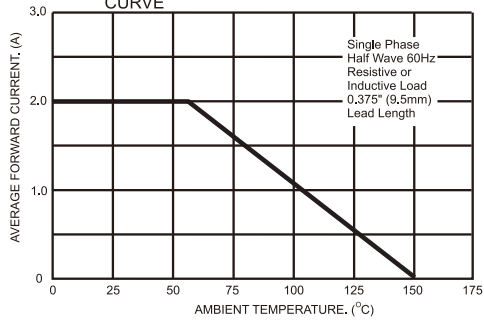


FIG.2- TYPICAL REVERSE CHARACTERISTICS

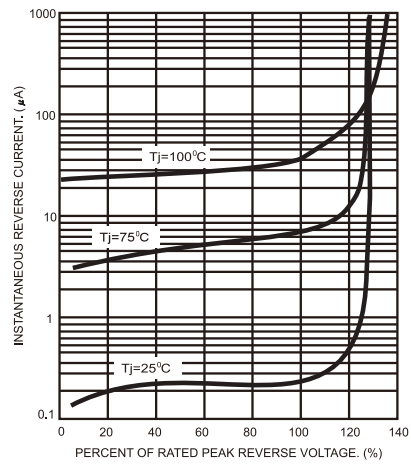


FIG.3- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

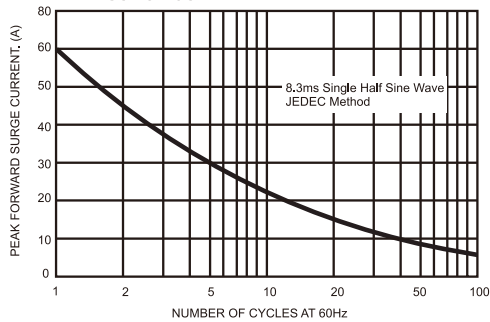


FIG.5- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

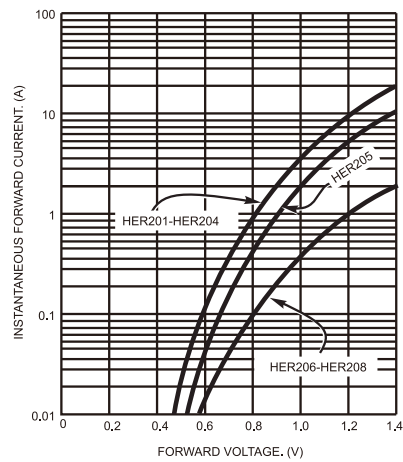


FIG.4- TYPICAL JUNCTION CAPACITANCE

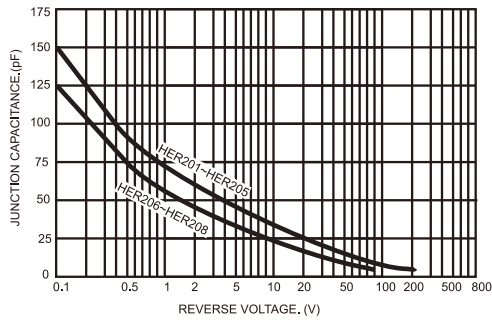


FIG.6- REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM

