



HER201 THRU HER208

2.0 AMPS. High Efficiency Rectifiers



Voltage Range
50 to 1000 Volts
Current
2.0 Amperes

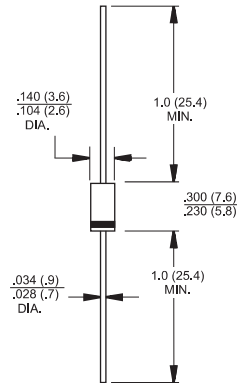
Features

- ✧ Low forward voltage drop
- ✧ High current capability
- ✧ High reliability
- ✧ High surge current capability

Mechanical Data

- ✧ Cases: Molded plastic
- ✧ Epoxy: UL 94V-O rate flame retardant
- ✧ Lead: Axial leads, solderable per MIL-STD-202, method 208 guaranteed
- ✧ Polarity: Color band denotes cathode end
- ✧ High temperature soldering guaranteed: 260°C/10 seconds/.375" (9.5mm) lead lengths at 5 lbs., (2.3kg) tension
- ✧ Weight: 0.40grams

DO-15



Maximum Rating 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	HER	HER	HER	HER	HER	HER	HER	Units	
		201	202	203	204	205	206	207	208		
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 @ $T_A = 55^\circ C$	$I_{(AV)}$	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 @ $T_a=25^\circ C$ at Rated DC Blocking Voltage @ $T_a=100^\circ C$	I_R	5.0 100								μA μA	
Maximum Reverse Recovery Time (Note 1)	T_{rr}	50					75				nS
Typical Junction Capacitance (Note 2)	C_j	50					35				pF
Typical Thermal Resistance (Note 3)	$R_{\theta JA}$	60								$^{\circ}C/W$	
Operating Temperature Range	T_J	-65 to +150								$^{\circ}C$	
Storage Temperature Range	T_{STG}	-65 to +150								$^{\circ}C$	

Notes: 1. Reverse Recovery Test Conditions: $I_F=0.5A$, $I_R=1.0A$, $I_{RR}=0.25A$

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.

RATINGS AND CHARACTERISTIC CURVES (HER201 THRU HER208)

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

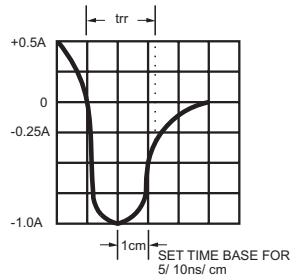
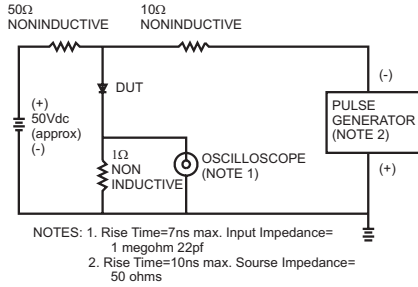


FIG.2- MAXIMUM AVERAGE FORWARD CURRENT DERATING

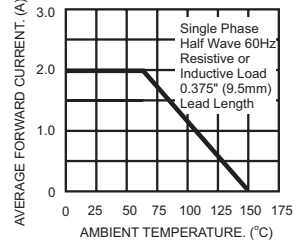


FIG.3- TYPICAL REVERSE CHARACTERISTICS

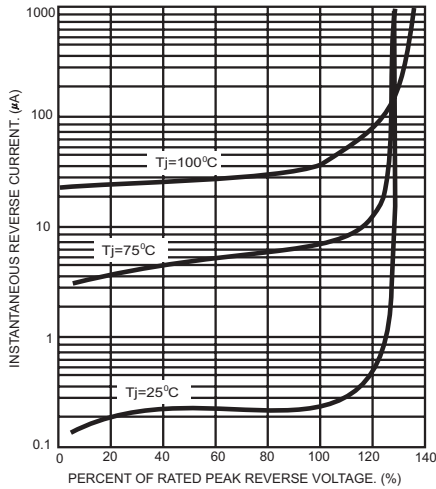


FIG.4- TYPICAL FORWARD CHARACTERISTICS

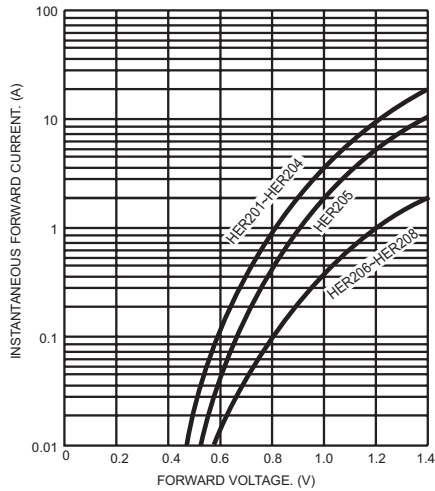


FIG.5- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

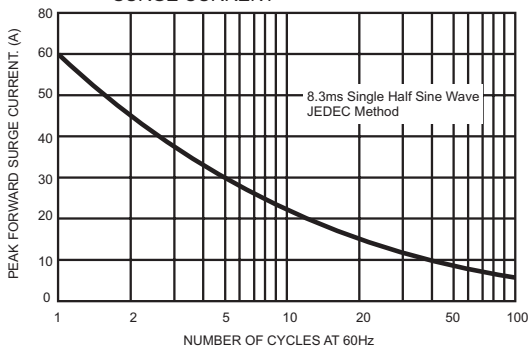


FIG.6- TYPICAL JUNCTION CAPACITANCE

