



# HER151 THRU HER158

**1.5 AMPS. HIGH EFFICIENT RECTIFIERS**

Voltage Range  
50 to 1000 Volts  
Current  
1.5 Amperes

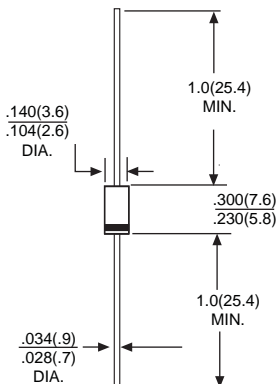
**Features**

- \*Low forward voltage drop
- \*High current capability
- \*High reliability
- \*High surge current capability

**Mechanical Data**

- \*Cases: Molded plastic DO-15
- \*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: 250°C/10 seconds/.375", (9.5mm) lead lengths at 5 lbs., (2.3kg) tension
- \*Mounting position: Any
- \*Weight: 0.40 gram

**DO-15**



Dimensions in inches and (millimeters)

**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

Rating at 25°C ambient temperature unless otherwise specified.  
Single phase, half wave, 60Hz, resistive or inductive load.  
For capacitive load, derate current by 20%

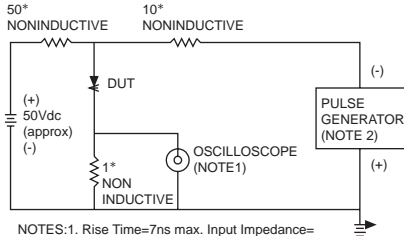
Type Number		HER151	HER152	HER153	HER154	HER155	HER156	HER157	HER158	UNITS	
Maximum Repetitive Peak Reverse Voltage	VRRM	50	100	200	300	400	600	800	1000	V	
Maximum RMS Voltage	VRMS	35	70	140	210	280	420	560	700	V	
Maximum DC Blocking Voltage	VDC	50	100	200	300	400	600	800	1000	V	
Maximum Average Forward Rectified Current .375" (9.5mm) Lead Length @ TA = 55°C	IF(AV)	1.5								A	
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	IFSM	50								A	
Maximum Instantaneous Forward Voltage @ 1.5A	VF	1.0			1.3		1.7			V	
Maximum DC Reverse Current @ TA = 25°C at Rated DC Blocking Voltage @ TA = 100°C	IR					5.0 100					µA µA
Maximum Reverse Recovery Time (Note 1)	TRR	50				75				nS	
Typical Junction Capacitance (Note 2)	CJ	50				30				pF	
Operating Temperature Range	TJ	-55 to +125									°C
Storage Temperature Range	TSTG	-55 to +150									°C

NOTES: 1. Reverse Recovery Test Conditions: IF=0.5A, IR=1.0A, IRR=0.25A  
2. Measured at 1 MHz and Applied Reverse Voltage of 4.0 V D.C.

# RATING AND CHARACTERISTIC CURVES HER151 THRU HER158



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



NOTES:1. Rise Time=7ns max. Input Impedance= 1 megohm 22pf  
2. Rise Time=10ns max. Source Impedance= 50 ohms

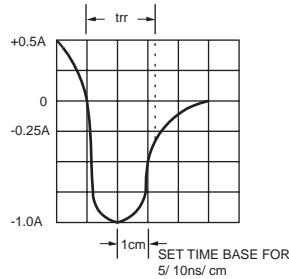


FIG.2-MAXIMUM AVERAGE FORWARD CURRENT DERATING

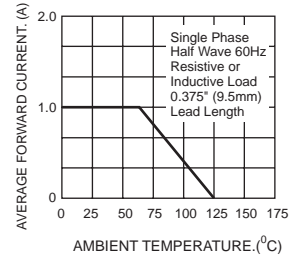


FIG.3-TYPICAL REVERSE CHARACTERISTICS

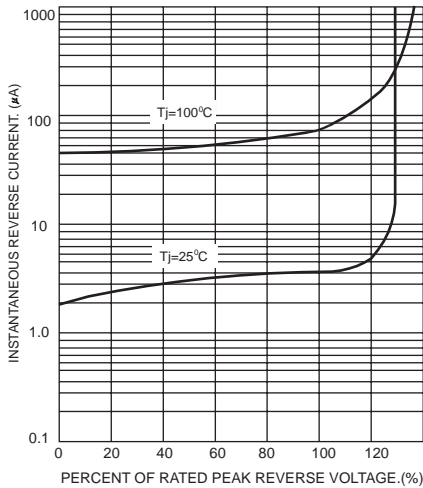


FIG.4-TYPICAL FORWARD CHARACTERISTICS

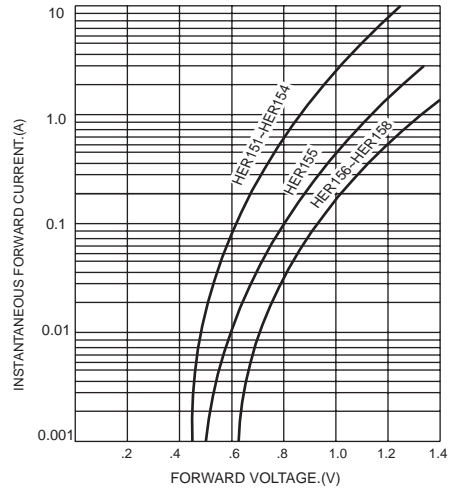


FIG.5-MAXIMUM NON-REPETITIVE SURGE CURRENT

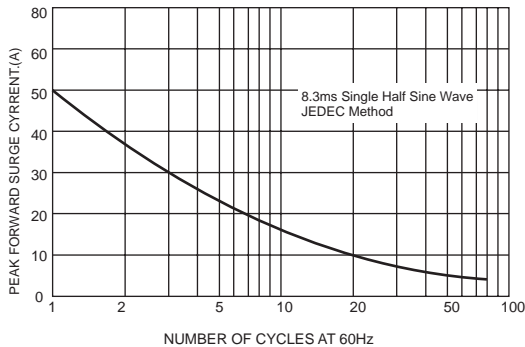


FIG.6-TYPICAL JUNCTION CHARACTERISTICS

