

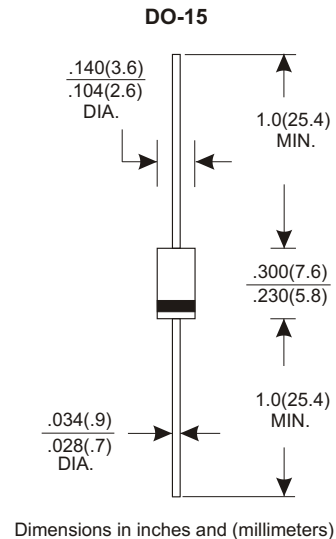


## FEATURES

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

## MECHANICAL DATA

- \* Case: Molded plastic
- \* Epoxy: UL 94V-0 rate flame retardant
- \* Lead: Axial leads, solderable per MIL-STD-202, method 208 guaranteed
- \* Polarity: Color band denotes cathode end
- \* Mounting position: Any
- \* Weight: 0.40 grams



## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

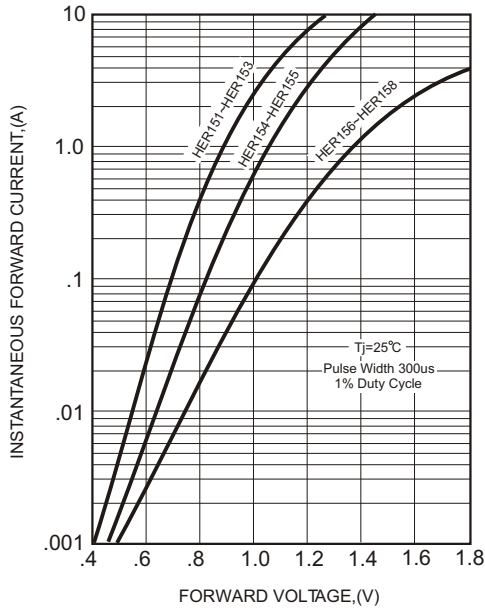
TYPE NUMBER	HER151	HER152	HER153	HER154	HER155	HER156	HER157	HER158	UNITS	
Maximum Recurrent Peak Reverse Voltage	50	100	200	300	400	600	800	1000	V	
Maximum RMS Voltage	35	70	140	210	280	420	560	700	V	
Maximum DC Blocking Voltage	50	100	200	300	400	600	800	1000	V	
Maximum Average Forward Rectified Current										
.375" (9.5mm) Lead Length at Ta=50°C									1.5	A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)									50	A
Maximum Instantaneous Forward Voltage at 1.5A	1.0		1.3		1.85				V	
Maximum DC Reverse Current Ta=25°C									5.0	µA
at Rated DC Blocking Voltage Ta=100°C									150	µA
Maximum Reverse Recovery Time (Note 1)	50				70				nS	
Typical Junction Capacitance (Note 2)									30	pF
Operating and Storage Temperature Range Tj, Tstg									-65 — +150	°C

### NOTES:

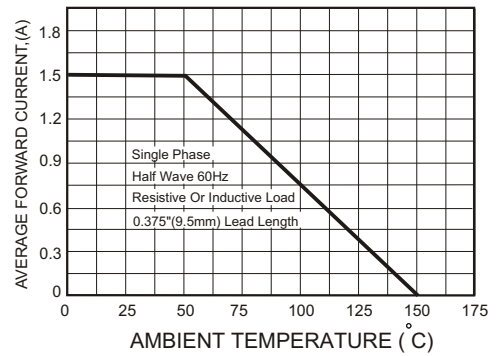
1. Reverse Recovery Time test condition:  $I_F=0.5A$ ,  $I_R=1.0A$ ,  $I_{RR}=0.25A$
2. Measured at 1MHz and applied reverse voltage of 4.0V D.C.

**RATING AND CHARACTERISTIC CURVES (HER151 THRU HER158)**

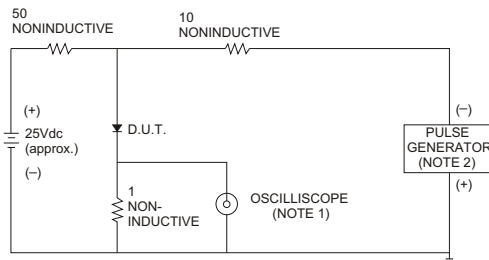
**FIG.1-TYPICAL FORWARD CHARACTERISTICS**



**FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE**

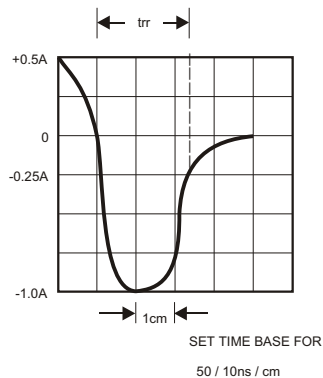


**FIG.3- TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTICS**

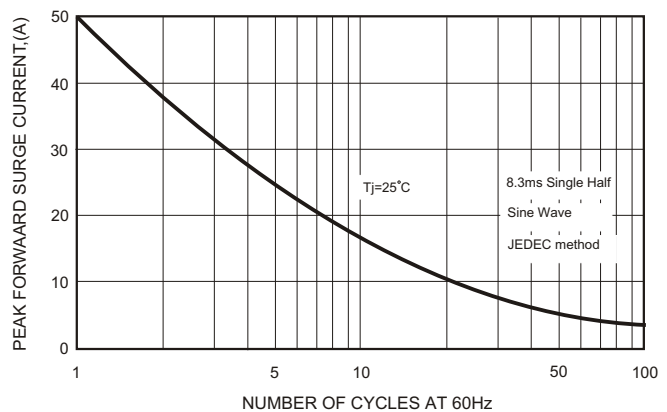


NOTES: 1. Rise Time= 7ns max., Input Impedance= 1 megohm, 22pF.

2. Rise Time= 10ns max., Source Impedance= 50 ohms.



**FIG.4-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT**



**FIG.5-TYPICAL JUNCTION CAPACITANCE**

