

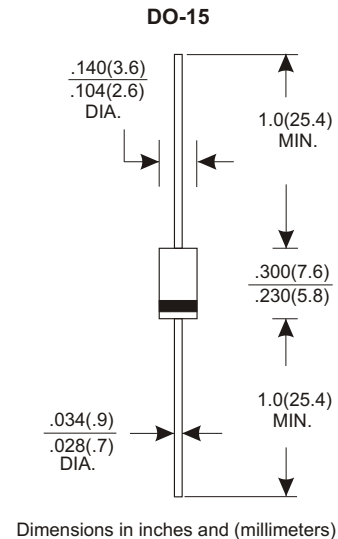


FEATURES

- * 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

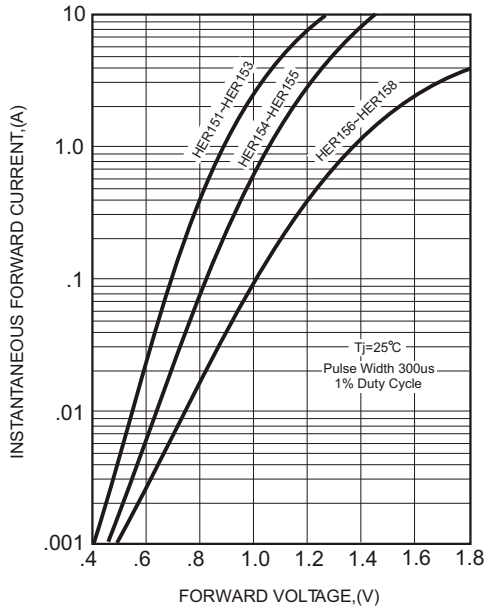


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

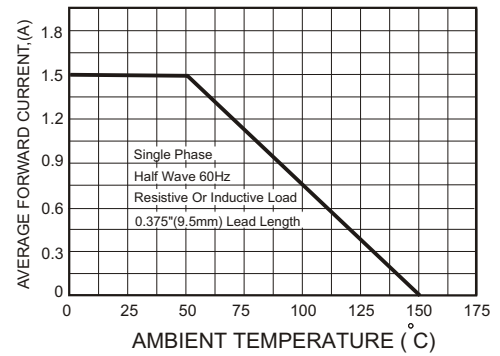
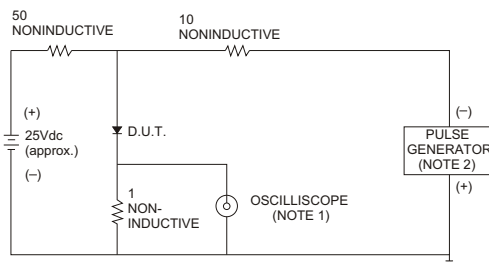


FIG.3- TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTICS



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

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

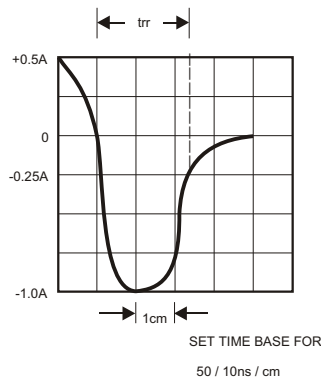


FIG.4-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

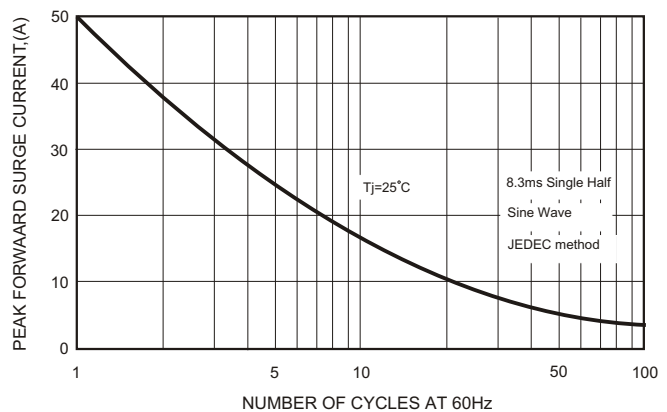


FIG.5-TYPICAL JUNCTION CAPACITANCE

