
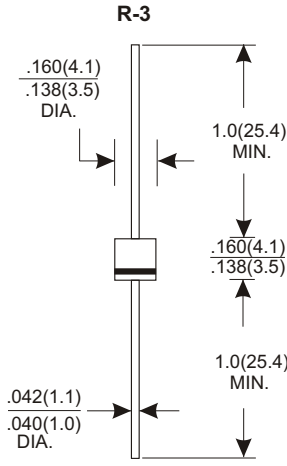


## HER251 THRU HER258

2.5 AMP HIGH EFFICIENCY RECTIFIERS

 <h3 style="margin-top: 20px;">FEATURES</h3> <ul style="list-style-type: none"> <li>* Low forward voltage drop</li> <li>* High current capability</li> <li>* High reliability</li> <li>* High surge current capability</li> </ul> <h3 style="margin-top: 20px;">MECHANICAL DATA</h3> <ul style="list-style-type: none"> <li>* Case: Molded plastic</li> <li>* Epoxy: UL 94V-0 rate flame retardant</li> <li>* Lead: Axial leads, solderable per MIL-STD-202, method 208 guranteed</li> <li>* Polarity: Color band denotes cathode end</li> <li>* Mounting position: Any</li> <li>* Weight: 0.54 grams</li> </ul>	<h3 style="text-align: center;">VOLTAGE RANGE</h3> <p style="text-align: center;">50 to 1000 Volts</p> <h3 style="text-align: center;">CURRENT</h3> <p style="text-align: center;">2.5 Amperes</p> <div style="text-align: center; margin-top: 20px;">  <p style="font-size: small;">R-3</p> <p style="font-size: x-small;">Dimensions in inches and (millimeters)</p> </div>
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### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

TYPE NUMBER	HER251	HER252	HER253	HER254	HER255	HER256	HER257	HER258	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	2.5								A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	70								A
Maximum Instantaneous Forward Voltage at 2.5A	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)	35								pF
Operating and Storage Temperature Range Tj, Tstg	-65 — +150								°C

**NOTES:**

1. Reverse Recovery Time test condition: IF=0.5A, IR=1.0A, IRR=0.25A
2. Measured at 1MHz and applied reverse voltage of 4.0V D.C.

## RATING AND CHARACTERISTIC CURVES (HER251 THRU HER258)

FIG.1-TYPICAL FORWARD CHARACTERISTICS

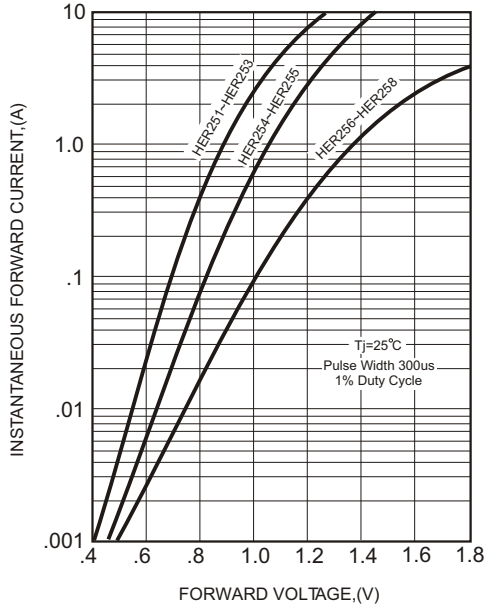


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

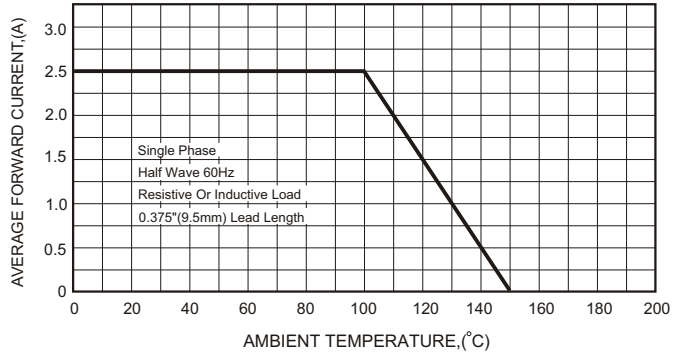
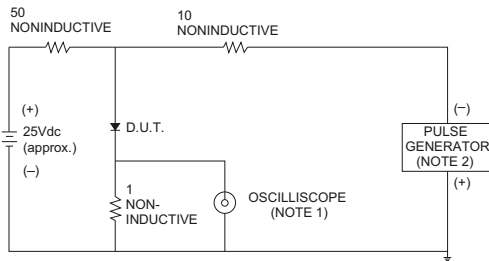


FIG.3- TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTICS



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

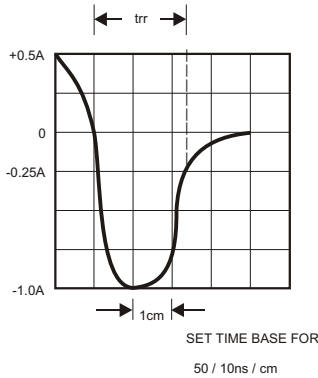


FIG.4-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

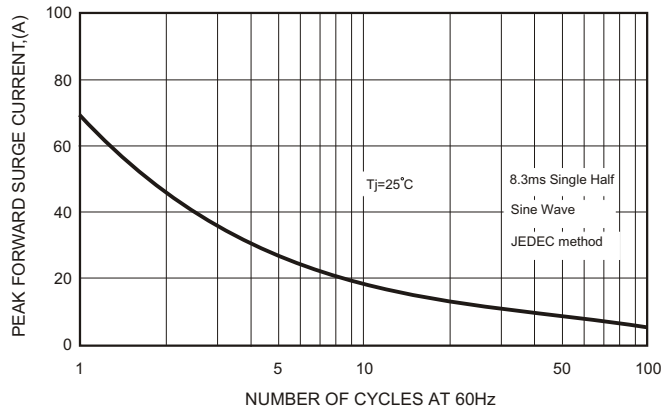


FIG.5-TYPICAL JUNCTION CAPACITANCE

