

## **HER151 THRU HER158**

### HIGH EFFICIENCY RECTIFIER

Reverse Voltage - 50 to 1000 Volts

Forward Current - 1.5Amperes

#### **FEATURES**

. Plastic package has Underwrites Laboratory

Flammability Classification 94V-0

- . Low forward voltage drop
- . High current capability
- . High reliability
- . Low power loss, high effciency
- . High surge current capability
- . High speed seitching
- . Low leakage

#### **MECHANICAL DATA**

. Case: JEDEC DO-41 molded plastic body

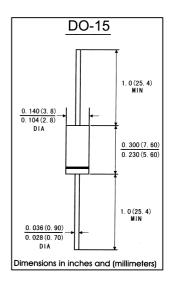
. Epoxy: UL94V-0 rate flame retardant

. Lead: plated axial leads, solderable per MIL-STD-750, method 2026

. Polarity: Color band denotes cathode end

. Mounting Position: Any

. Weight: 0.014 ounce, 0.39 gram



#### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

	Compleada	HER			HER				HER	l luite
	Symbols	151	152	153	154	155	156	157	158	Units
Maximum repetitive peak reverse voltage	VRRM	50	100	200	300	400	600	800	1000	Volts
Maximum RMS voltage	VRMS	35	70	140	210	280	420	560	700	Volts
Maximum DC blocking voltage	VDC	50	100	200	300	400	600	800	1000	Volts
Macimum average forward rectified	I(AV) 1.5								Amp	
current 0.375"(9.5mm)lead length at Ta=55 $^{\circ}\mathrm{C}$	1.0							71111		
Peak forward surge current 8.3ms									Amps	
sing-wave superimposed on rated load	IFSM	IFSM 50.0								
(JEDEC method)										
Maximum instantaneous forward voltage at 2.0 A	VF		1.0		1	.1		1.7		Volts
Maximum DC Rreverse Current at rated DC			5.0							
blocking voltage at Ta=25°C		0.0								
Maximum full load reverse current full cycle	lr e								μΑ	
average. 0.375"(9.5mm)lead length at		100								
TL=55℃										
Maximum reverse recovery time(Note 1)	Trr	50				70		ns		
Typical junction Capacitance(Note 2)	Сı	50 30				pF				
Operating and storage temperature range	ТЈТѕтс	-65 to +150							$^{\circ}\!$	

Notes: 1.Test conditions:IF=0.5A,IR=1.0A,Irr=0.25A.

2.Measured at 1MHz and applied reverse voltage of 4.0V Volts



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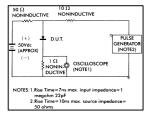
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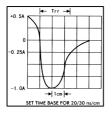
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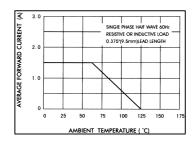
### **RATINGS AND CHARACTERISTIC CURVES HER151 THRU HER158**

# FLG.1-TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTIC

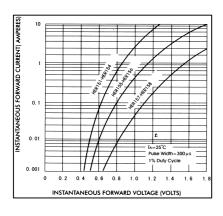




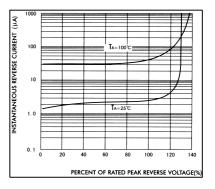
# FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE



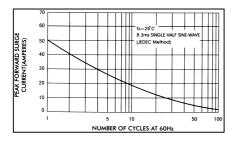
#### FIG.3-TYPICAL FORWARD CHARATERISTICS



## FIG.4-TYPICAL REVERSE CHARACTERISTICS



# FIG.5-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT



#### FIG.6-TYPICAL JUNCTION CAPACITANCE

