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HER151 THRU HER158

Features

- Lead Free Finish/Rohs Compliant (Note1) ("P" Suffix designates Compliant. See ordering information)
- High Surge Current Capability
- High Reliability
- Low Forward Voltage Drop
Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1

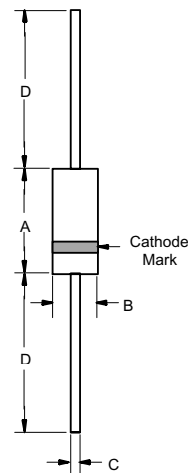
Maximum Ratings

- Operating Temperature: -55°C to +125°C
- Storage Temperature: -55°C to +150°C
- For capacitive load, derate current by 20%

Catalog Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
HER151	HER151	50V	35V	50V
HER152	HER152	100V	70V	100V
HER153	HER153	200V	140V	200V
HER154	HER154	300V	210V	300V
HER155	HER155	400V	280V	400V
HER156	HER156	600V	420V	600V
HER157	HER157	800V	560V	800V
HER158	HER158	1000V	700V	1000V

**1.5 Amp High
Efficient Rectifiers
50 to 1000 Volts**

DO-15



Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	1.5 A	$T_A = 55^\circ\text{C}$
Peak Forward Surge Current	I_{FSM}	50A	8.3ms, half sine
Maximum Instantaneous Forward Voltage	V_F	HER151-154: 1.0V HER155: 1.3V HER156-158: 1.7V	$I_{FM} = 1.5A^*$; $T_A = 25^\circ\text{C}$
Reverse Current At Rated DC Blocking Voltage (Maximum DC)	I_R	5.0 μA 100 μA	$T_A = 25^\circ\text{C}$ $T_A = 100^\circ\text{C}$
Maximum Reverse Recovery Time	T_{rr}	HER151-155: 50ns HER156-158: 75ns	$I_F=0.5A, I_R=1.0A,$ $I_{rr}=0.25A$
Typical Junction Capacitance	C_J	HER151-155: 50pF HER156-158: 30pF	Measured at 1.0MHz, $V_R=4.0V$

*Pulse Test: Pulse Width 300 μsec , Duty Cycle 1%

Note: 1. High Temperature Solder Exemptions Applied, see EU Directive Annex 7.

DIM	DIMENSIONS				NOTE
	INCHES		MM		
A	.230	.300	5.8	7.6	
B	.104	.140	2.6	3.6	
C	.028	.034	0.71	0.86	
D	1.000	---	25.40	---	

HER151 thru HER158

RATINGS AND CHARACTERISTIC CURVES

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

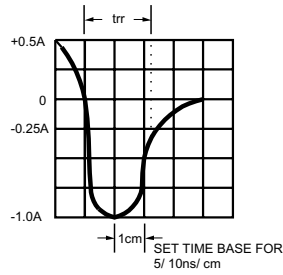
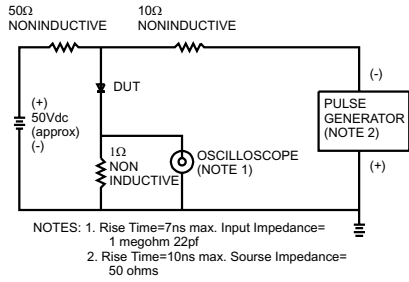


FIG.2- MAXIMUM AVERAGE FORWARD CURRENT DERATING

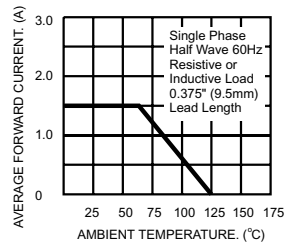


FIG.3- TYPICAL REVERSE CHARACTERISTICS

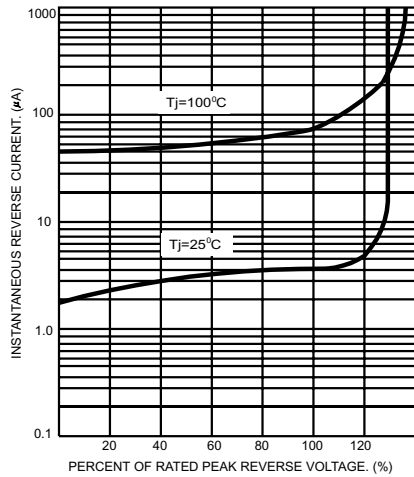


FIG.4- TYPICAL FORWARD CHARACTERISTICS

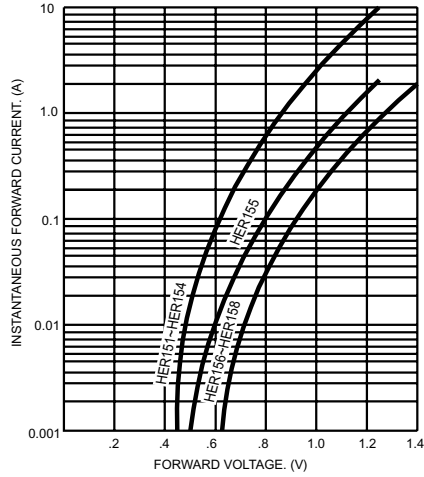


FIG.5- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

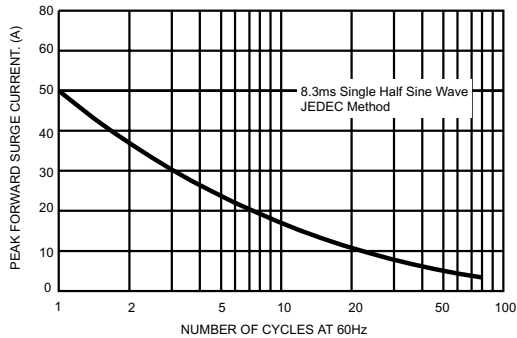


FIG.6- TYPICAL JUNCTION CAPACITANCE

