

HER101S THRU HER108S

Features

- High Surge Current Capability
- High Reliability
- Low Forward Voltage Drop
- High Current Capability

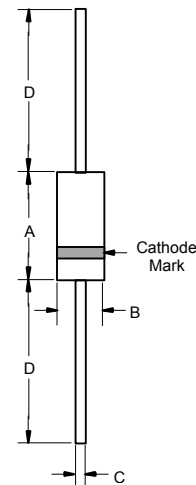
Maximum Ratings

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

Item Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
HER101S	---	50V	35V	50V
HER102S	---	100V	70V	100V
HER103S	---	200V	140V	200V
HER104S	---	300V	210V	300V
HER105S	---	400V	280V	400V
HER106S	---	600V	420V	600V
HER107S	---	800V	560V	800V
HER108S	---	1000V	700V	1000V

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

A-405



Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	1.0 A	$T_A = 55^\circ\text{C}$
Peak Forward Surge Current	I_{FSM}	30A	8.3ms, half sine
Maximum Instantaneous Forward Voltage HER101S-104S HER105S HER106S-108S	V_F	1.0V 1.3V 1.7V	$I_{FM} = 1.0\text{A};$ $T_A = 25^\circ\text{C}$
Reverse Current At Rated DC Blocking Voltage (Maximum DC)	I_R	5.0 A 100 A	$T_A = 25^\circ\text{C}$ $T_A = 100^\circ\text{C}$
Maximum Reverse Recovery Time HER101S-105S HER106S-108S	T_{rr}	50ns 75ns	$I_F=0.5\text{A}, I_R=1.0\text{A},$ $I_{rr}=0.25\text{A}$
Typical Junction Capacitance HER101S-105S HER106S-108S	C_J	20pF 15pF	Measured at 1.0MHz, $V_R=4.0\text{V}$

DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.166	.205	4.10	5.20	
B	.080	.107	2.00	2.70	
C	.021	.025	.53	.64	
D	1.000	---	25.40	---	

Notes: 1. 300 us Pulse Width, 1% Duty Cycle.

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RATINGS AND CHARACTERISTIC CURVES

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

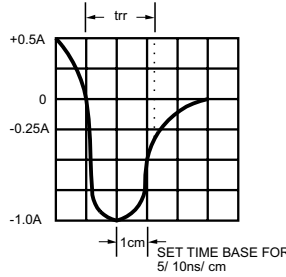
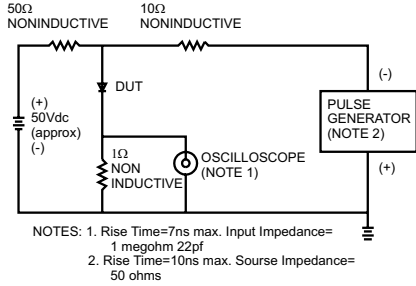


FIG.2- MAXIMUM AVERAGE FORWARD CURRENT DERATING

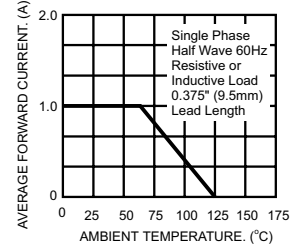


FIG.3- TYPICAL REVERSE CHARACTERISTICS

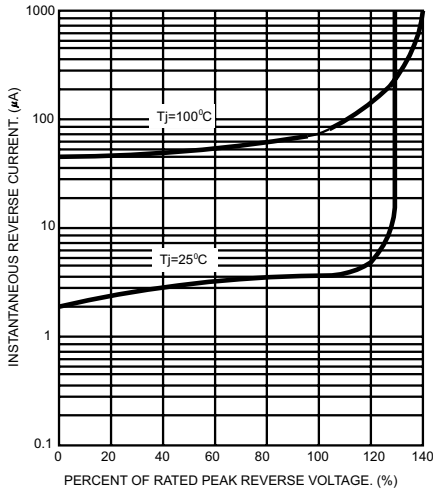


FIG.4- TYPICAL FORWARD CHARACTERISTICS

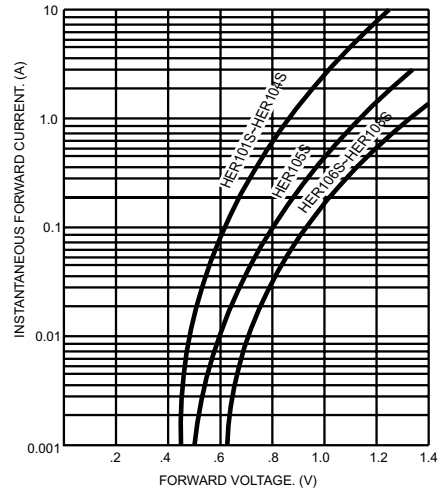


FIG.5- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

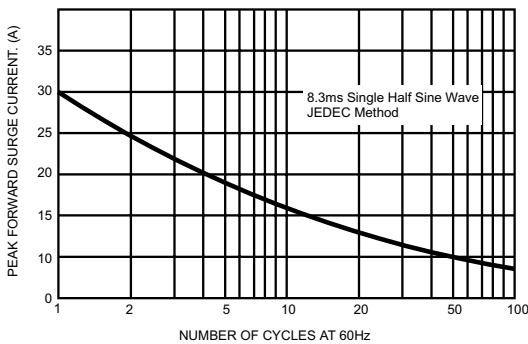


FIG.6- TYPICAL JUNCTION CAPACITANCE

