Shanghai Minyue
Semiconductors Co.,Ltd
Tel:0086-21-57159233
Fax:0086-21-60415325

HER101 THRU HER108

1.0 Amp High Efficient Rectifiers 50 to 1000 Volts

Features

High Surge Current Capability
Low Forward Voltage Drop
- Lead Free Finish/RoHS Compliant (Note1) ("P"Suffix designates Compliant. See ordering information)

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 capcitive load, derate current by 20%

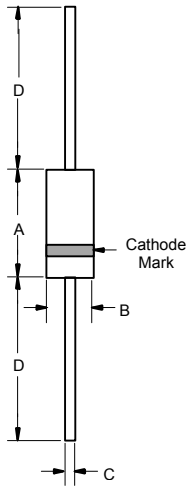
Catalog Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
HER101	HER101	50V	35V	50V
HER102	HER102	100V	70V	100V
HER103	HER103	200V	140V	200V
HER104	HER104	300V	210V	300V
HER105	HER105	400V	280V	400V
HER106	HER106	600V	420V	600V
HER107	HER107	800V	560V	800V
HER108	HER108	1000V	700V	1000V

Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	1.0 A	T_A = 55°C
Peak Forward Surge Current	I_{FSM}	30A	8.3ms, half sine
Maximum Instantaneous Forward Voltage HER101-104 HER105 HER106-108	V_F	 1.0V 1.3V 1.7V	 I_{FM} = 1.0A; T_A = 25°C
Reverse Current At Rated DC Blocking Voltage (Maximum DC)	I_R	5.0 A 100 A	T_A = 25°C T_A = 100°C
Maximum Reverse Recovery Time HER101-105 HER106-108	T_{rr}	 50ns 75ns	 I_F=0.5A, I_R=1.0A, I_{rr}=0.25A
Typical Junction Capacitance HER101-105 HER106-108	C_J	 20pF 15pF	 Measured at 1.0MHz, V_R=4.0V

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

DO-41

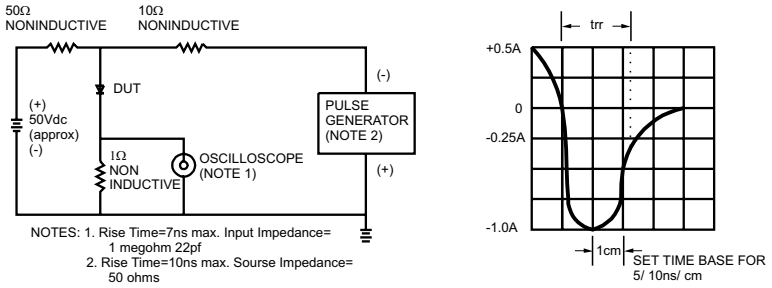


DIMENSIONS					
	INCHES		MM		
DIM	MIN	MAX	MIN	MAX	NOTE
A	.166	..205	4.2	5.2	
B	.08	.107	2.0	2.7	
C	.028	.034	.71	.86	
D	1.000	---	25.40	---	

HER101 THRU HER108

RATINGS AND CHARACTERISTIC CURVES

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



NOTES: 1. Rise Time=7ns max. Input Impedance= 1 megohm 22pf
2. Rise Time=10ns max. Sourse Impedance= 50 ohms

FIG.2- MAXIMUM AVERAGE FORWARD CURRENT DERATING

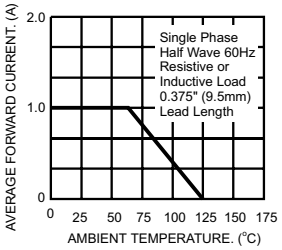


FIG.3- TYPICAL REVERSE CHARACTERISTICS

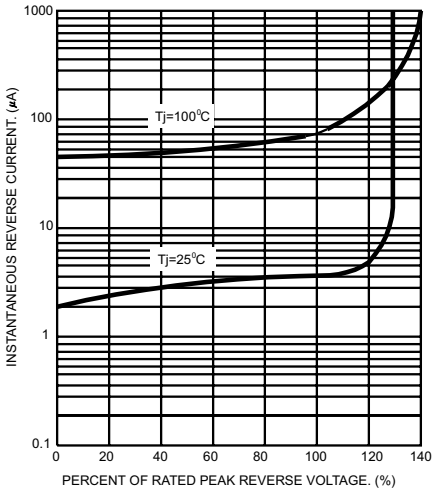


FIG.4- TYPICAL FORWARD CHARACTERISTICS

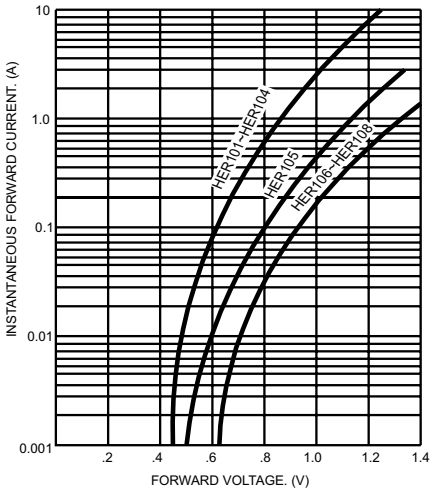


FIG.5- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

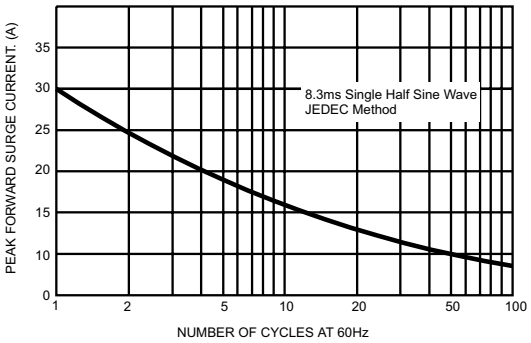


FIG.6- TYPICAL JUNCTION CAPACITANCE