

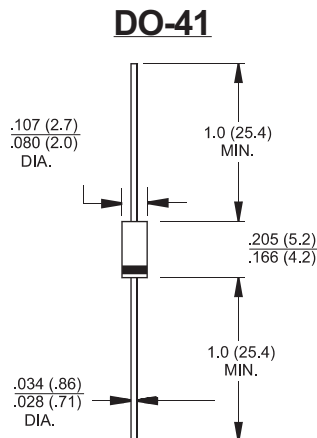


Features

- High efficiency, Low VF
- High current capability
- High reliability
- High surge current capability
- For use in low voltage, high frequency inverter, free wheeling, and polarity protection application.

Mechanical Data

- Cases: Molded plastic DO-41
- Epoxy: UL 94V0 rate flame retardant
- Polarity: Color band denotes cathode
- High temperature soldering guaranteed:
260°C/10 seconds/.375"(.95mm) lead
lengths at 5 lbs., (2.3kg) tension
- Weight: 0.35 gram



Dimensions in inches and (millimeters)

Maximum Ratings and Electrical Characteristics

Rating at 25 °C ambient temperature unless otherwise specified.

Single phase, half wave, 60 Hz, resistive or inductive load.

For capacitive load, derate current by 20%

Type Number	Symbol	HER 101	HER 102	HER 103	HER 104	HER 105	HER 106	HER 107	HER 108	Units
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	50	100	200	300	400	600	800	1000	V
Maximum RMS Voltage	V _{RMS}	35	70	140	210	280	420	560	700	V
Maximum DC Blocking Voltage	V _{DC}	50	100	200	300	400	600	800	1000	V
Maximum Average Forward Rectified Current .375 (9.5mm) Lead Length @T _A = 55 °C	I _(AV)	1.0								A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I _{FSM}	30								A
Maximum Instantaneous Forward Voltage @ 1.0A	V _F	1.0				1.3	1.7			V
Maximum DC Reverse Current T _A =25 °C at Rated DC Blocking Voltage T _A =125 °C	I _R	5.0 150								uA uA
Maximum Reverse Recovery Time (Note 1)	T _{rr}	50					75			nS
Typical Junction Capacitance (Note 2)	C _j	25					20			pF
Typical Thermal Resistance	R _{θJA}	70								°C/W
Operating Temperature Range	T _J	-65 to +150								°C
Storage Temperature Range	T _{STG}	-65 to +150								°C

Notes: 1. Reverse Recovery Test Conditions: $I_F=0.5A$, $I_R=1.0A$, $I_{RR}=0.25A$

2. Measured at 1 MHz and Applied Reverse Voltage of 4.0 V D.C.

3. Mount on Cu-Pad Size 5mm x 5mm on PCB.

HER101-HER108

1.0AMP. High Efficient Rectifiers

RATINGS AND CHARACTERISTIC CURVES (HER101 THRU HER108)

FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

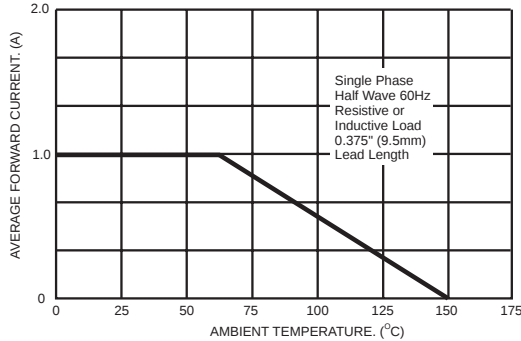


FIG.3- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

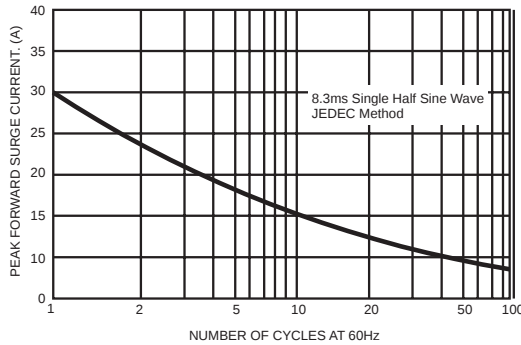


FIG.4- TYPICAL JUNCTION CAPACITANCE

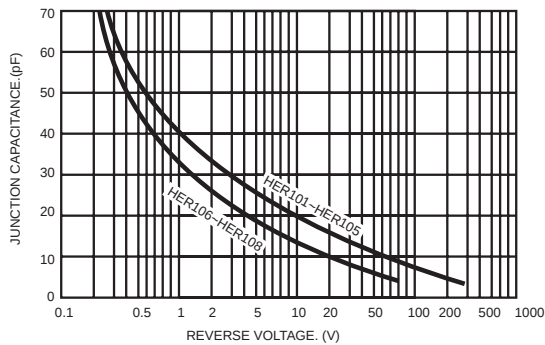
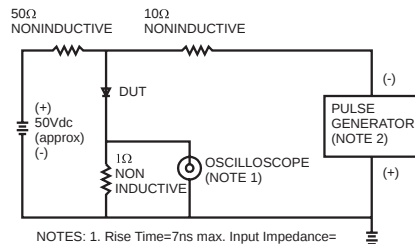


FIG.6- REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM



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

FIG.2- TYPICAL REVERSE CHARACTERISTICS

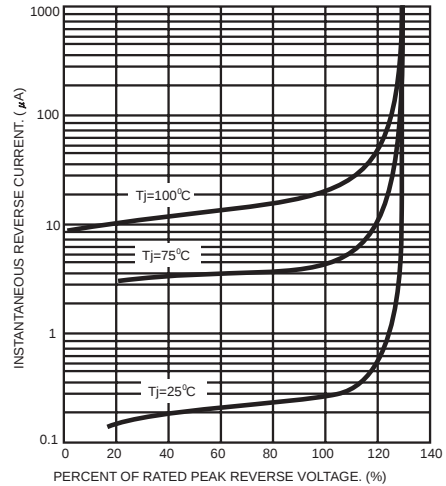
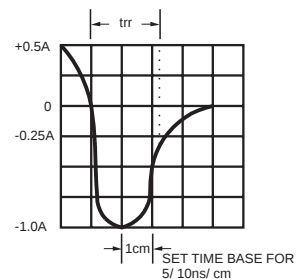
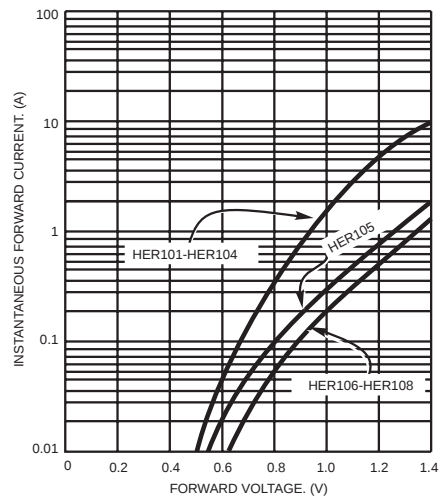


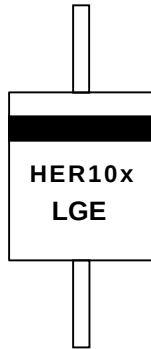
FIG.5- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



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MARKING INFORMATION



Cathode = Polarity Band
 HER10xG = Device Number
 x = 1, 2, 3, 4, 5, 6, 7 or 8
 LGE = Manufacturer's Logo

TAPING SPECIFICATIONS

