

A suffix of "-C" indicates halogen-free & RoHS Compliant

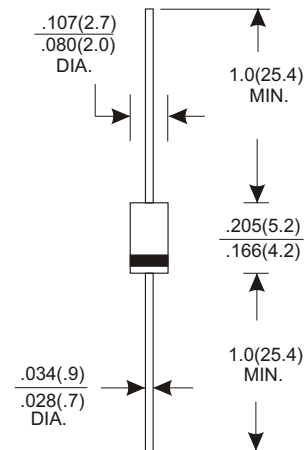
**DO-41**

**FEATURES**

- RoHS Compliant Product
- Low Forward Voltage Drop
- High Current Capability
- High Reliability
- High Surge Current Capability
- High Speed Switching

**MECHANICAL DATA**

- Case: Molded Plastic
- Epoxy: UL 94V-0 Rate Flame Retardant
- Lead: Axial Lead, Solder Able per MIL-STD-202, Method 208 Guaranteed
- Polarity: Color Band Denotes Cathode End
- Mounting Position: Any
- Weight: 0.34 grams



Dimensions in inches and (millimeters)



**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

(Tamb = 25 °C unless otherwise specified)

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

For capacitive load, derate current by 20%

Parameter	HER101	HER102	HER103	HER104	HER105	HER106	HER107	Units	
Max. recurrent peak reverse voltage	50	100	200	400	600	800	1000	V	
Max. RMS voltage	35	70	140	280	420	560	700	V	
Max. DC blocking voltage	50	100	200	400	600	800	1000	V	
Max. avg. forward rectified current, .375" (9.5mm) lead length at Ta = 55 °C	1.0							A	
Peak forward surge current, 8.3 ms single-half sine-wave superimposed on rated load (JEDEC method)	30							A	
Max. instantaneous forward voltage at 1.0A	1.0		1.3		1.7			V	
Max. DC reverse current Ta = 25 °C at rated DC blocking voltage Ta =100 °C	5.0			100					µA
Max. reverse recovery time (Note 1)	50				75			ns	
Typical junction capacitance (Note 2)	20				15			pF	
Operating temperature range T <sub>J</sub>	-65~+150							°C	
Storage temperature range T <sub>STG</sub>	-65~+150							°C	

Notes:

1. Reverse Recovery Time Test condition: I<sub>F</sub> = 0.5 A, I<sub>R</sub> = 1.0 A, I<sub>RR</sub> = 0.25 A
2. Measured at 1 MHz and applied reverse voltage of 4.0V D.C.

● RATING AND CHARACTERISTIC CURVES ( HER101 THRU HER107 )

FIG.1-TYPICAL FORWARD CHARACTERISTICS

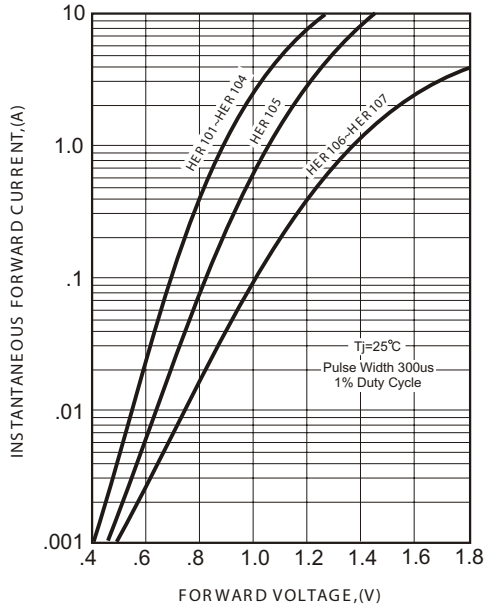


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

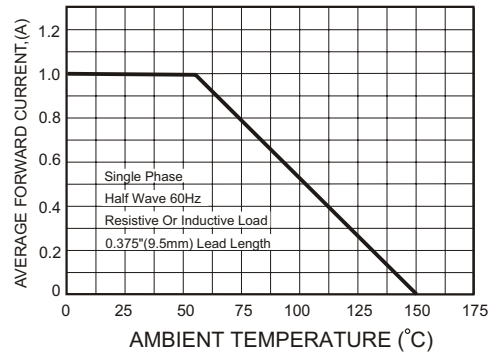


FIG.4-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

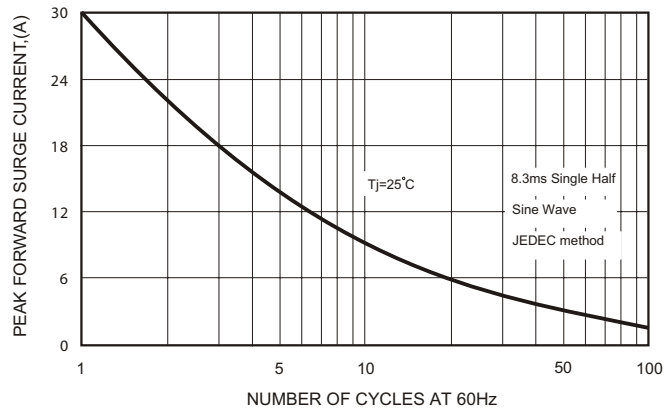
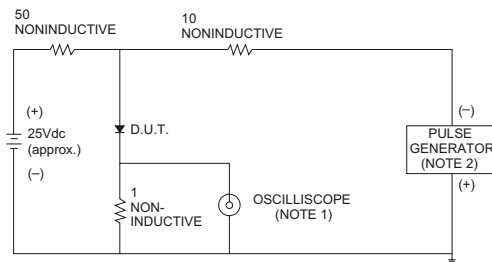


FIG.3- TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTICS



NOTES: 1. Rise Time= 7ns max., Input Impedance= 1 megohm.22pF.

2. Rise Time= 10ns max., Source Impedance= 50 ohms.

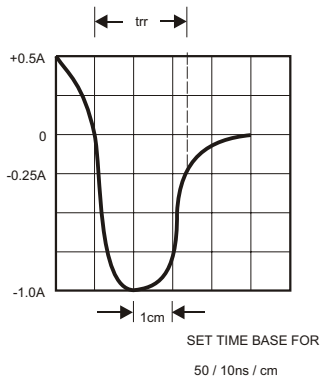


FIG.5-TYPICAL JUNCTION CAPACITANCE

