

RoHS Compliant Product
A suffix of "-C" specifies halogen & lead-free

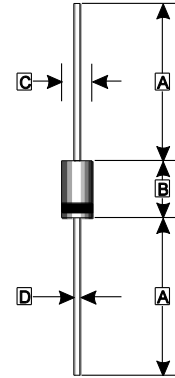
FEATURES

- Low forward voltage drop
- High current capability
- High reliability
- High surge current capability
- High speed switching

PACKAGING INFORMATION

- Glass Passivated
- Case: Molded plastic
- Epoxy: UL 94V-0 rate flame retardant
- Lead: Axial leads, solderable per MIL-STD-202, method 208 guaranteed
- Polarity: Color band denotes cathode end
- Mounting position: Any

DO-41



REF.	Millimeter	
	Min.	Max.
A	25.4 (TYP.)	
B	4.10	5.21
C	2.00	3.00
D	0.60	0.90

ORDER INFORMATION

Part Number	Type
HER101G~HER107G	Lead (Pb)-free
HER101G-C~HER107G-C	Lead (Pb)-free and Halogen-free

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(Rating 25°C ambient temperature unless otherwise specified. Single phase half wave, 60Hz, resistive or inductive load.
For capacitive load, de-rate current by 20%.)

Parameters	Symbol	Part Numbers							Units
		HER 101G	HER 102G	HER 103G	HER 104G	HER 105G	HER 106G	HER 107G	
Recurrent Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	V
DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Average Forward Rectified Current	I_O	1.0							A
Peak Forward Surge Current @60Hz Half-sine wave, 1 cycle, $T_A=25^\circ C$	I_{FSM}	30							A
Max. Instantaneous Forward Voltage @ $I_F=1A$	V_F	1.0		1.3		1.7			V
Reverse Current at Rated DC Blocking Voltage Per Diode	$T_A=25^\circ C$	5.0							uA
	$T_A=100^\circ C$	150							
Max. Reverse Recovery Time ¹	T_{RR}	50				70			nS
Typ. Junction Capacitance ²	C_J	20				15			pF
Typical Thermal Resistance	$R_{\theta JA}$	60							°C/W
	$R_{\theta JC}$	21							
Operating Temperature Range	T_J	-55~150							°C
Storage Temperature Range	T_{STG}	-55~150							

Notes:

1. $I_F=0.5A$, $I_R=1A$, $I_{RR}=0.25A$.
2. Measured at 1MHz and applied reverse voltage of 5V D.C.

RATINGS AND CHARACTERISTIC CURVES (HER101G THRU HER107G)

FIG.1-TYPICAL FORWARD CHARACTERISTICS

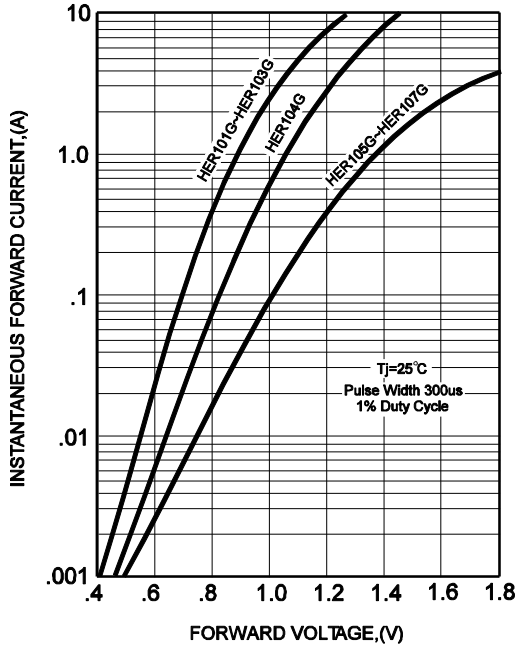


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

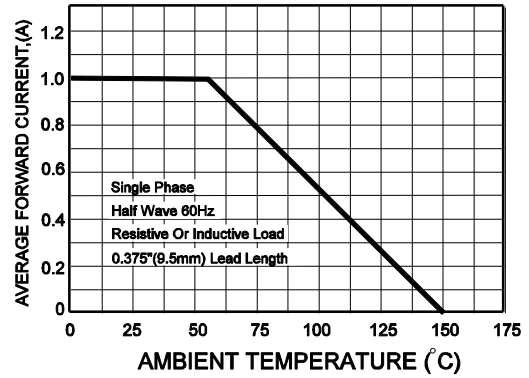


FIG.4-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

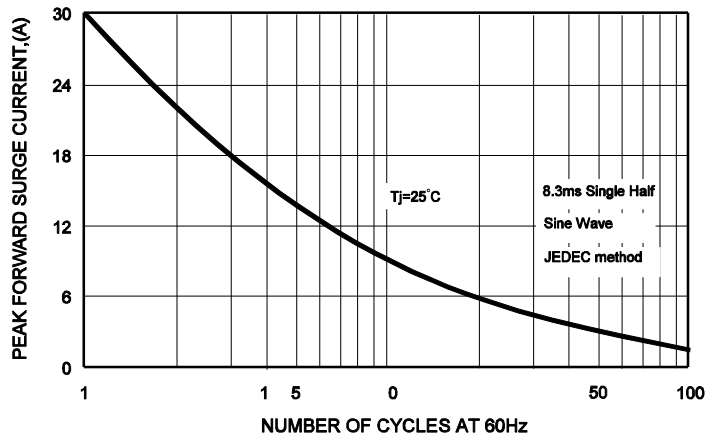
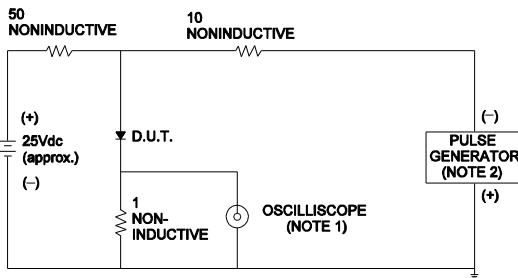


FIG.3- TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTICS



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

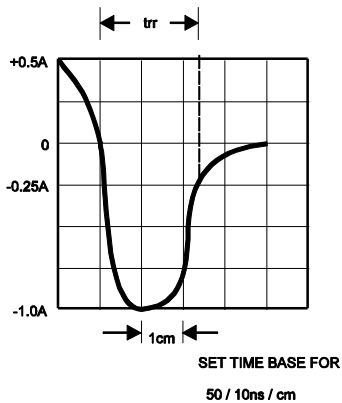


FIG.5-TYPICAL JUNCTION CAPACITANCE

