



PINGWEI ENTERPRISE

HER101 THRU HER108

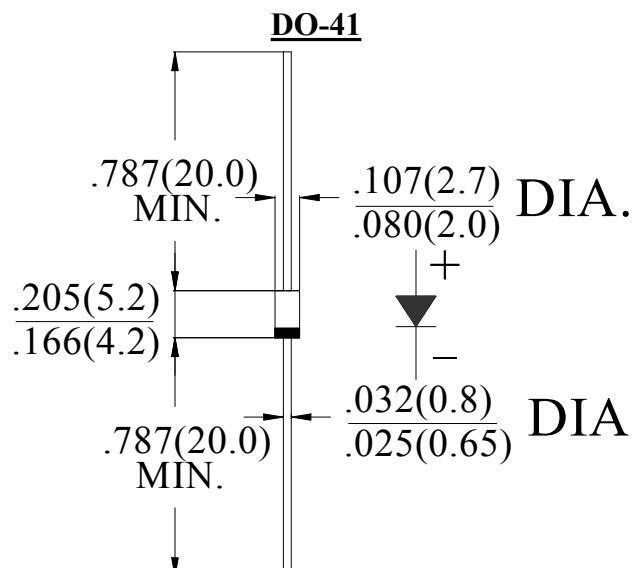
1.0AMP. HIGH EFFICIENCY PLASTIC RECTIFIER

FEATURE

- . Low leakage
- . Low forward voltage drop
- . High current capability
- . High surge capability
- . High reliability
- . High temperature soldering guaranteed
260°C /10sec / 0.375" lead length at 5 lbs tension

MECHANICAL DATA

- . Terminal: Plated axial leads solderable per
MIL-STD 202E, method 208C
- . Case: Molded with UL-94 Class V-0 recognized
Flame Retardant Epoxy
- . Polarity: color band denotes cathode
- . Mounting position: any



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

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

For capacitive load, derate current by 20%

Type Number	SYM BOL	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 at $T_A=55^\circ C$	$I_{F(AV)}$	1.0								A				
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	30								A				
Maximum Instantaneous forward Voltage at 1.0A DC	V_F	1.0			1.3	1.7			V					
Maximum DC Reverse Current @ $T_A=25^\circ C$ at rated DC blocking voltage @ $T_A=100^\circ C$	I_R	5.0 100.0								μA				
Maximum Reverse Recovery Time (Note 1)	t_{rr}	50				75				nS				
Typical Junction Capacitance (Note 2)	C_J	20				15				pF				
Typical Thermal Resistance (Note 3)	$R_{(JA)}$	75								$^\circ C/W$				
Storage Temperature	T_{STG}	-55 to +150								$^\circ C$				
Operation JunctionTemperature	T_J	-55 to +150								$^\circ C$				

Note:

- Test Conditions: $I_F=0.5A$, $I_R=1.0A$, $I_{RR}=0.25A$
- Measured at 1.0 MHz and applied reverse voltage of 4.0Vdc
- Thermal Resistance from Junction to Ambient at 0.375" (9.5mm) lead length, vertical P.C. Board Mounted.

RATING AND CHARACTERISTIC CURVES (HER101 THRU HER108)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

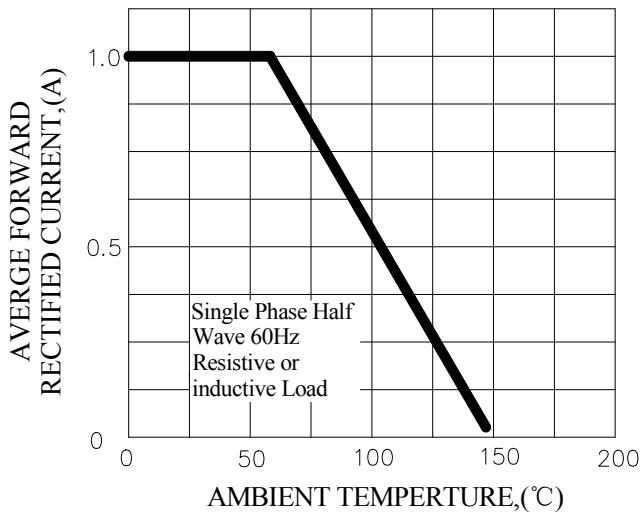


FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

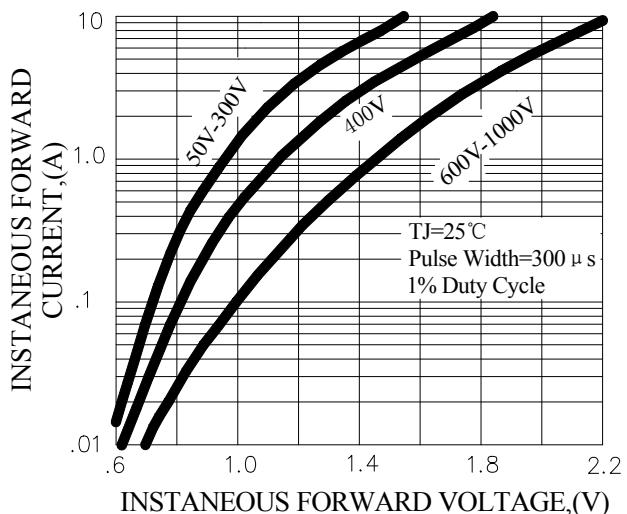


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

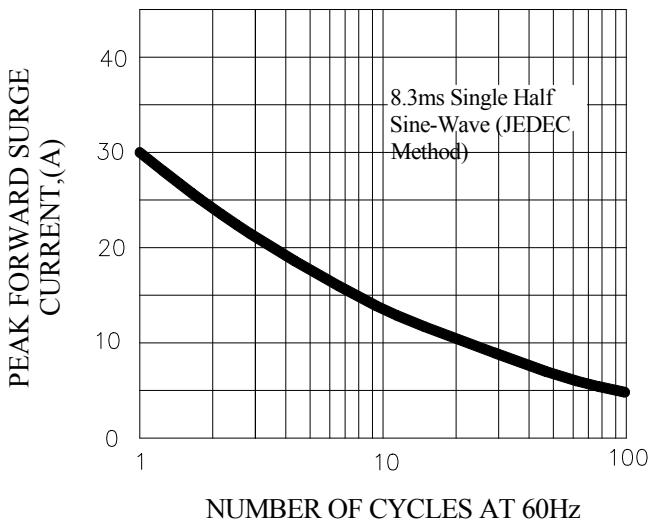


FIG.4-TYPICAL REVERSE CHARACTERISTICS

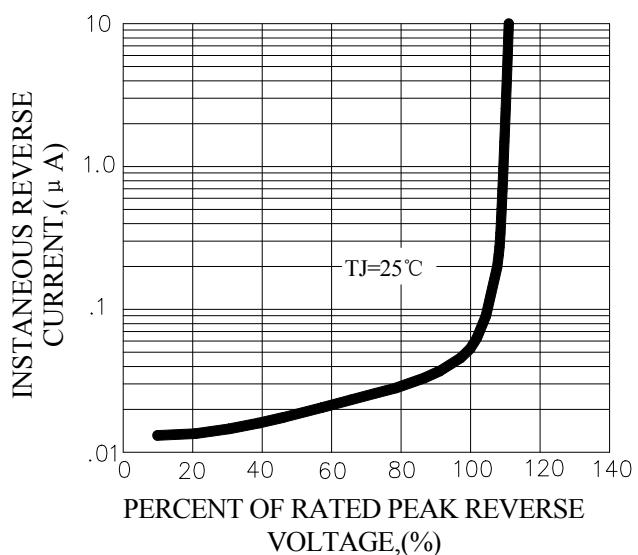
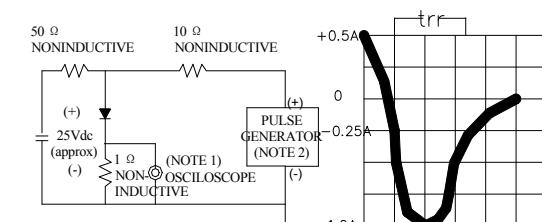


FIG.5-TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTIC



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

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