

**HIGH EFFICIENCY RECTIFIERS**

**VOLTAGE RANGE: 100 --- 600 V**  
**CURRENT: 20 A**

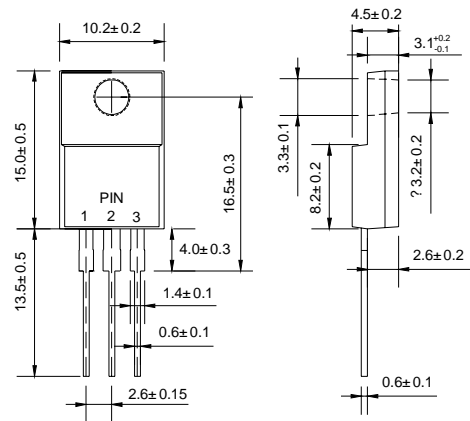
**FEATURES**

- ◇ Low cost
- ◇ Low leakage
- ◇ Low forward voltage drop
- ◇ High current capability
- ◇ Easily cleaned with alcohol, Isopropanol and similar solvents
- ◇ The plastic material carries U/L recognition 94V-0

**MECHANICAL DATA**

- ◇ Case: JEDEC ITO-220AB, molded plastic
- ◇ Terminals: Plated leads, solderable per MIL-STD-202, Method 208
- ◇ Polarity: As marked
- ◇ Weight: 0.06 ounces, 1.67 grams
- ◇ Mounting position: Any

**ITO - 220AB**



Dimensions in millimeters

**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60 Hz, resistive or inductive load. For capacitive load, derate by 20%.

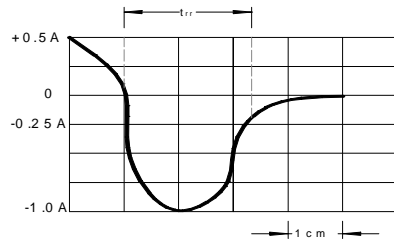
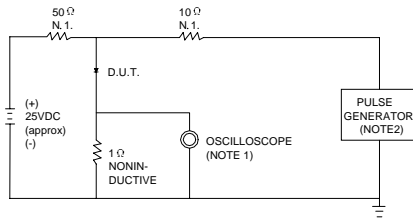
		HER 2010FC	HER 2020FC	HER 2040FC	HER 2060FC	UNITS
Maximum recurrent peak reverse voltage	$V_{RRM}$	100	200	400	600	V
Maximum RMS voltage	$V_{RMS}$	70	140	280	420	V
Maximum DC blocking voltage	$V_{DC}$	100	200	400	600	V
Maximum average forward rectified current @ $T_c=75^\circ C$	$I_{F(AV)}$	20				A
Peak forward surge current 8.3ms single half-sine-wave superimposed on rated load @ $T_j=125^\circ C$	$I_{FSM}$	200				A
Maximum instantaneous forward voltage @ 10A	$V_F$	1.0		1.3	1.7	V
Maximum reverse current @ $T_c=25^\circ C$ at rated DC blocking voltage @ $T_c=100^\circ C$	$I_R$		10 150			$\mu A$
Maximum reverse recovery time (Note1)	$t_{rr}$		50		100	ns
Typical junction capacitance (Note2)	$C_J$		40			pF
Typical thermal resistance (Note3)	$R_{\theta JC}$		2.5			$^\circ C/W$
Operating junction temperature range	$T_J$	- 55 ---- + 150				$^\circ C$
Storage temperature range	$T_{STG}$	- 55 ---- + 150				$^\circ C$

NOTE: 1. Measured with  $I_F=0.5A$ ,  $I_R=1A$ ,  $t_{rr}=0.25A$ .

2. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.

3. Thermal resistance junction to case.

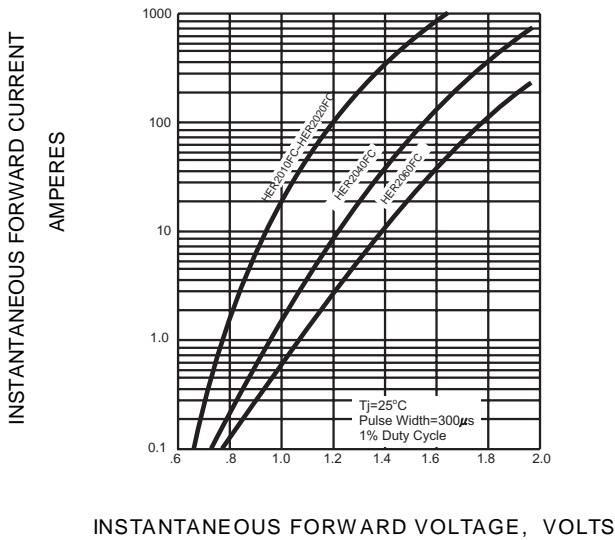
**FIG.1 -- TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTIC**



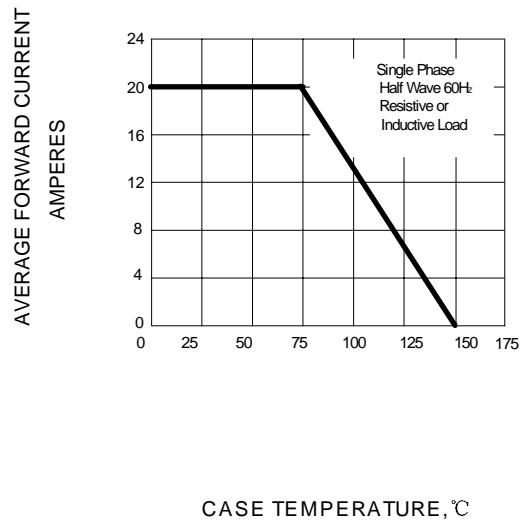
NOTES:1.RISE TIME = 7ns MAX.INPUT IMPEDANCE = 1MΩ.22pF.  
2.RISE TIME =10ns MAX.SOURCE IMPEDANCE=50 Ω.

SET TIME BASE FOR 25 ns/cm

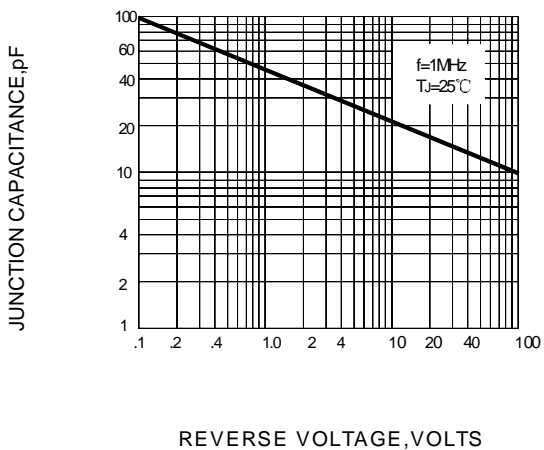
**FIG.2 -- TYPICAL FORWARD CHARACTERISTIC**



**FIG.3 -- FORWARD DERATING CURVE**



**FIG.4 -- TYPICAL JUNCTION CAPACITANCE**



**FIG.5 -- PEAK FORWARD SURGE CURRENT**

