

HIGH EFFICIENCY RECTIFIERS

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

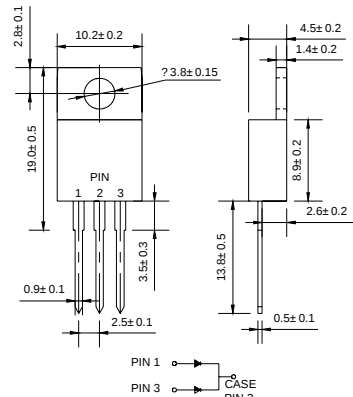
FEATURES

- ◇ 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 TO-220AB, molded plastic
- ◇ Terminals: Plated leads, solderable per MIL-STD-202, Method 208
- ◇ Polarity: As marked
- ◇ Weight: 0.071 ounces, 2.006 grams
- ◇ Mounting position: Any

TO - 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 2010C	HER 2020C	HER 2040C	HER 2060C	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 °C	$I_{F(AV)}$	20				A
Peak forward surge current 8.3ms single half-sine-wave superimposed on rated load @T _J =125°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°C at rated DC blocking voltage @T _C =100°C	I_R	10 150				μ 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				°C/W
Operating junction temperature range	T _J	- 55 ---- + 150				°C
Storage temperature range	T _{STG}	- 55 ---- + 150				°C

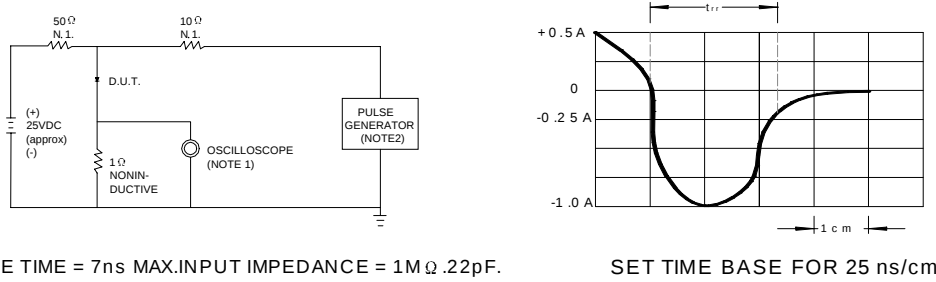
NOTE: 1. Measured with $I_E=0.5A$, $I_B=1A$, $I_{rr}=0.25A$.

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

3. Thermal resistance junction to case.

www.galaxycn.com

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



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

FIG.2 -- TYPICAL FORWARD CHARACTERISTIC

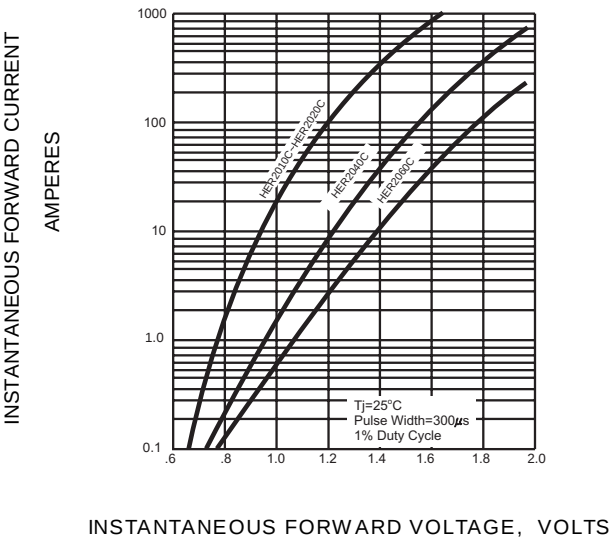


FIG.3 -- FORWARD DERATING CURVE

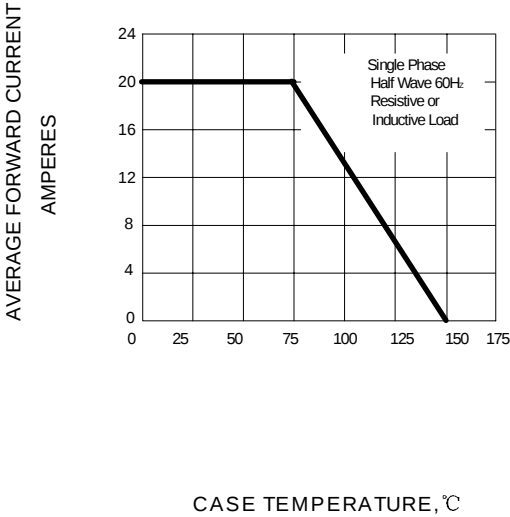


FIG.4 -- TYPICAL JUNCTION CAPACITANCE

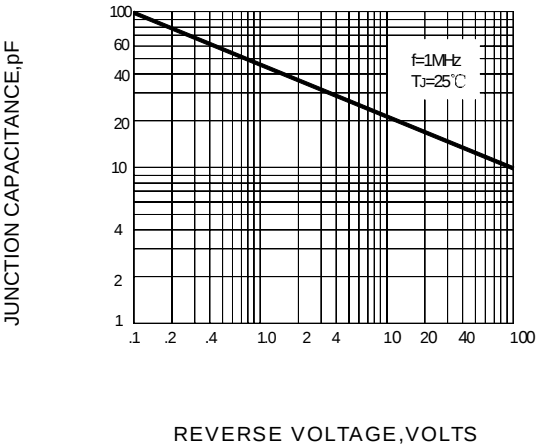


FIG.5 -- PEAK FORWARD SURGE CURRENT

