HER1601CT THRU HER1608CT

16.0AMPS. GLASS PASSIVATED HIGH EFFICIENT RECTIFIERS

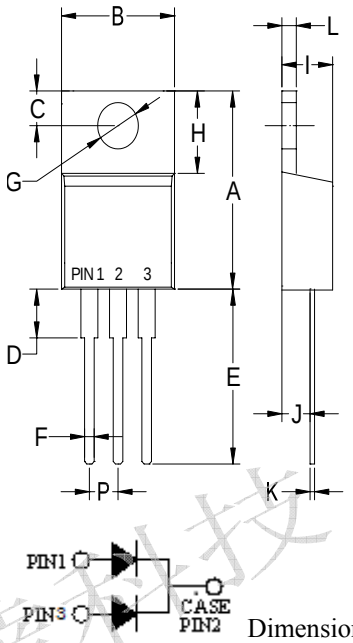
FEATURE

- Low forward voltage drop;
- High current capability;
- High reliability;
- High surge current capability;
- Epitaxial construction.
- High temperature soldering guaranteed: 260°C /10sec/0.16",(4.06mm) from case.

MECHANICAL DATA

- Terminals: Lead solderable per MIL-STD-202, method 208 guranteed.
- Case:MoldedwithUL-94V-0Class recognized Flame Retardant Epoxy
- Polarity: As Marked
- Mounting position:Any

TO-220AB



Dim	Min	Max
A	14.9	15.8
B	———	10.5
C	2.62	2.87
D	3.56	4.06
E	13.0	14.3
F	0.68	0.94
G	Φ3.74	Φ3.91
H	5.84	6.86
I	4.44	4.86
J	2.54	2.79
K	0.35	0.64
L	1.14	1.40
P	2.41	2.67

Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(single-phase, half-wave, 60HZ, resistive or inductive load rating at 25°C, unless otherwise stated)

Type Number	SYMBOL	HER 1601 CT	HER 1602 CT	HER 1603 CT	HER 1604 CT	HER 1605 CT	HER 1606 CT	HER 1607 CT	HER 1608 CT	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 Tc=100 C	$I_{F(AV)}$	16.0								A
Peak Forward Surge Current 8.3ms singlehalf sine-wave superimposed on rated load(JEDEC method)	I_{FSM}	150.0								A
Maximum Forward Voltage at 8.0A DC	V_F	1.0				1.3	1.7			V
Maximum DC Reverse Current@Ta =25°C at rated DC blocking voltage @Ta =125°C	I_R	10.0 400								mA
Maximum Reverse Recovery Time (Note 1)	t_{rr}	50					80			ns
Typical Junction Capacitance (Note2)	C_J	80					50			pF
Typical Thermal Resistance (Note3)	$R_{(JA)}$	3.0								℃/W
Storage Temperature	T_{STG}	-55 to +150								°C
Operating Junction Temperature	T_J	-55 to +150								°C

Note: 1. Test Conditions: I_F=0.5A, I_R=1.0A, I_{RR}=0.25A

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

3. Thermal Resistance From Junction to Case Mounted on Heatsink.

RATING AND CHARACTERISTIC CURVES (HER1601CT THRU HER1608CT)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

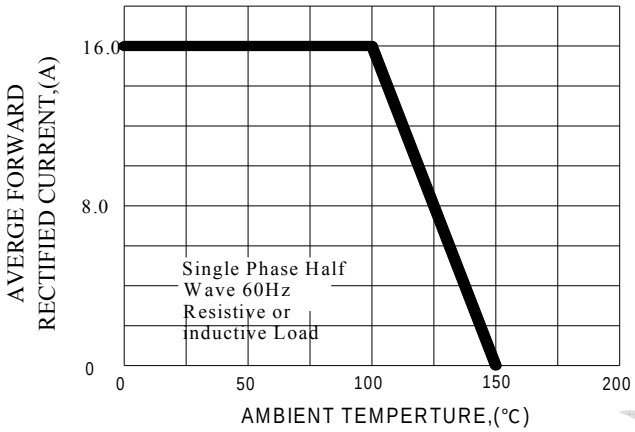


FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

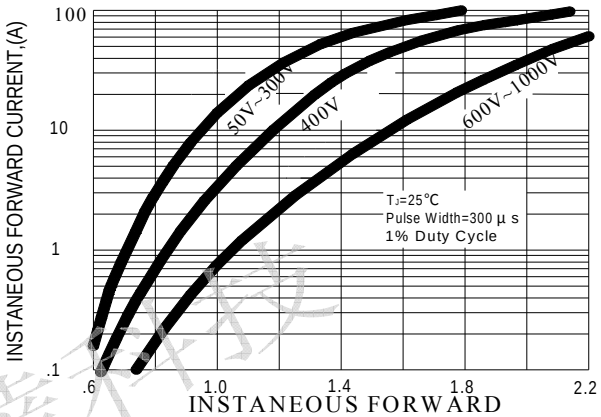


FIG.3-MAXIMUN NON-REPETITIVE FORWARD SURGE CURRENT

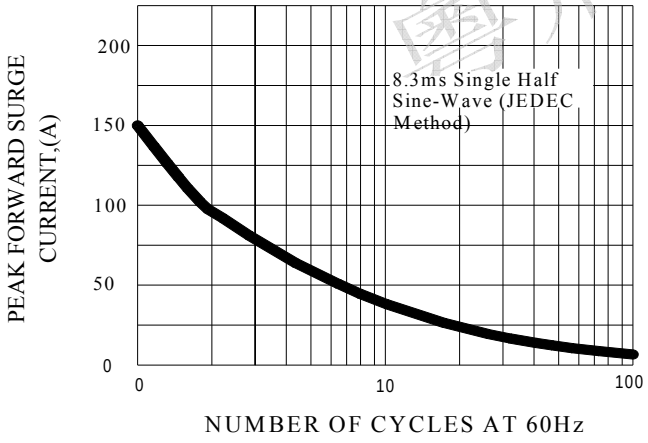


FIG.4-TYPICAL REVERSE CHARACTERISTICS

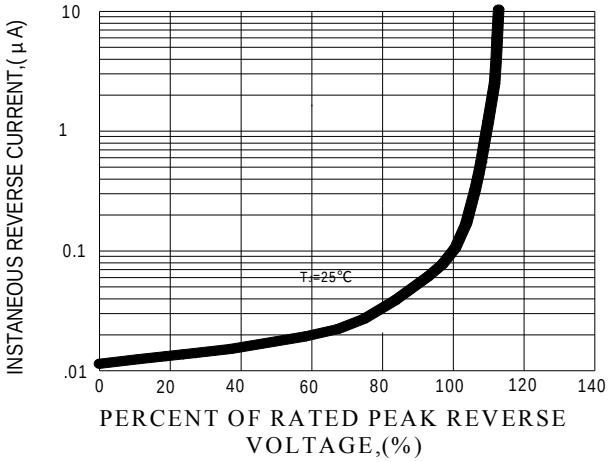
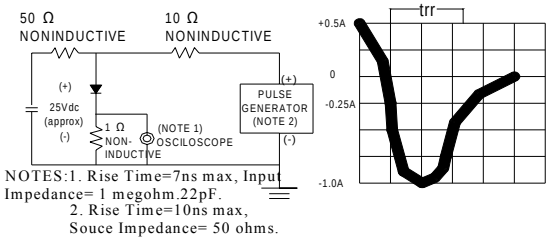


FIG.6-TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERSITIC



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