HER201~HER208

2.0 Amp High Efficiency Rectifiers

Features

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

DO-204AC (DO-15)

Mechanical Date

- **Case:**DO-204AC(DO-15) Molded plastic
- **Epoxy:** UL 94V-O rate flame retardant
- **Lead:** Axial leads,solderable per MIL-STD-202 method 208 guaranteed
- **Polarity:** Color band denotes cathode end
- **Mounting position:** Any
- **Weight:** 0.40 gram

Major Ratings and Characteristics

$I_{F(AV)}$	**2.0 A**
V_{RRM}	**50 V to 1000 V**
I_{FSM}	**60A**
t_{rr}	**50nS,75nS**
V_F	**1.0V,1.3V,1.7V**
T_j **max.**	**125 °C**

Maximum Ratings & Electrical Characteristics

Rating at 25℃ ambient temperature unless otherwise specified

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

Items	Symbol	HER 201	HER 202	HER 203	HER 204	HER 205	HER 206	HER 207	HER 208	UNIT
Maximum repetitive 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 Ta=50 C	$I_{F(AV)}$	2.0								A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	60								A
Typical Thermal Resistance(1)	$R_{\theta JA}$	60								℃/W
Operating junction temperature	T_J	–65 to +125								℃
Storage temperature range	T_{STG}	–65 to +125								℃

Note1: Mount on Cu-Pad Size 10mm x 10mm on P.C.B.

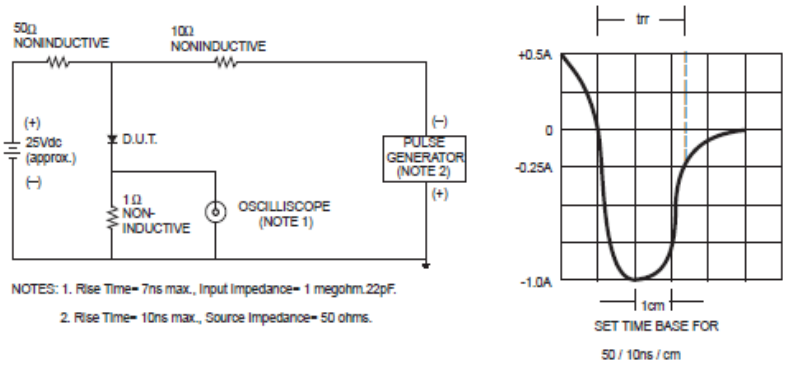
Electrical Characteristics

(T_A = 25 °C unless otherwise noted)

Items	Test conditions		Symbol	HER201~ HER203	HER204~ HER205	HER206~ HER208	UNIT
Instantaneous forward voltage	I_F=2.0 A		V_F	1.0	1.30	1.70	V
Reverse current	$V_R=V_{DC}$	T_j=25℃	I_R	5			μA
		T_j=100℃		100			
Reverse recovery time	I_F = 0.5 A , I_R = 1.0A, I_{rr} = 0.25 A		t_{rr}	50		75	nS

Rating and Characteristic Curves (HER101 THRU HER108)

FIG.1 Reverse Recovery Time Characteristic and Test Ciruit Diagram



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

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

FIG.2 Maximum Average Forward Current Derating

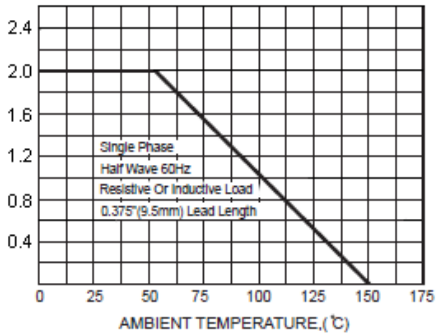


FIG.3 Typical Forward Characteristics

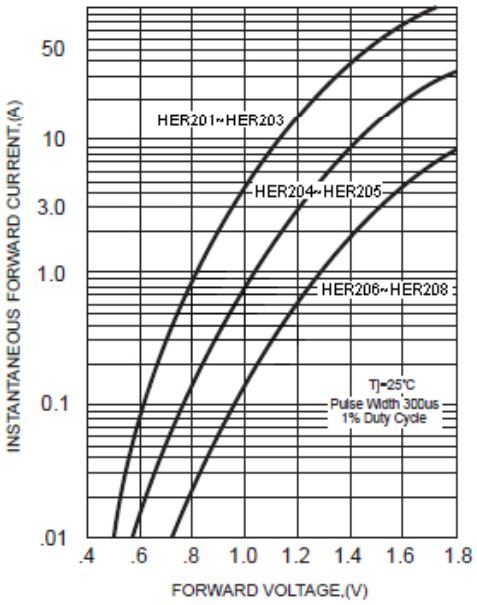


FIG.4 Typical Reverse Characteristics

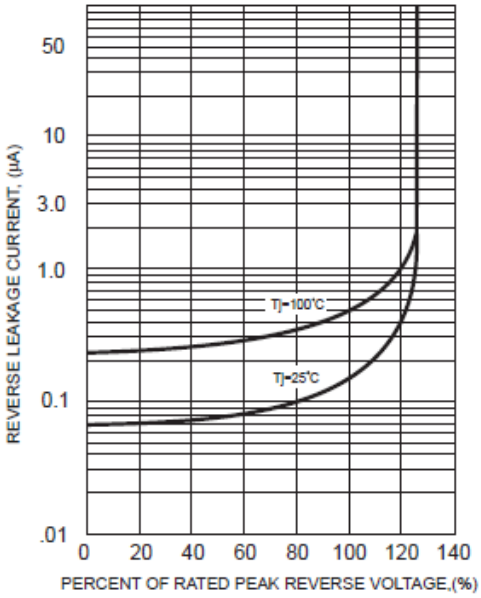
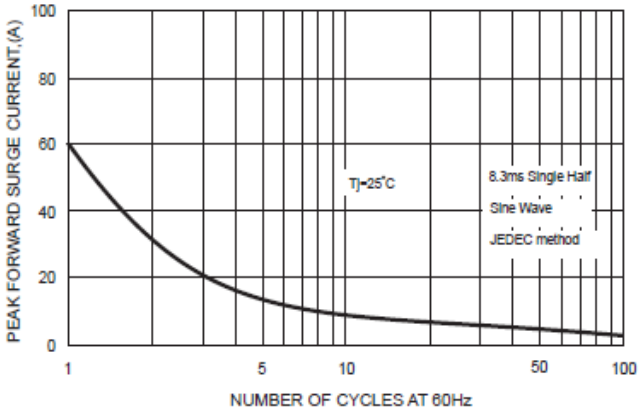
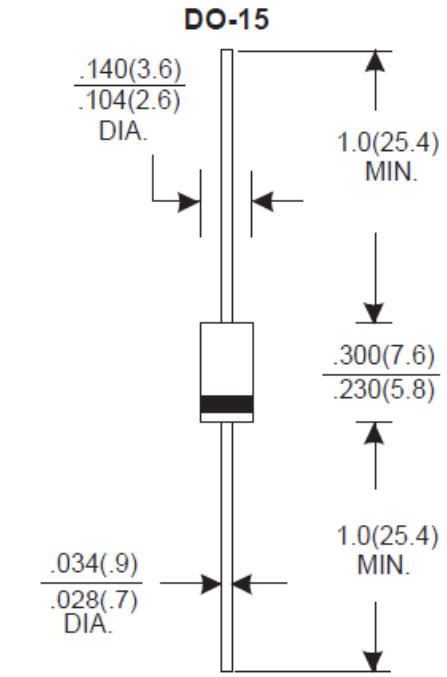


FIG.5 Maximum Non-repetitive Forward Surge Current



Package Outline



Dimensions in inches and (millimeters)