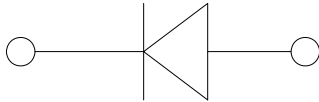
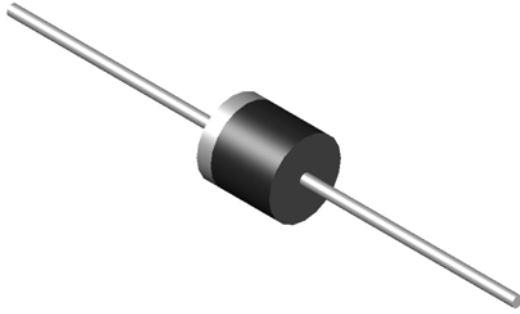


## High Efficient Rectifier



### Features

- High efficiency
- High current capability
- High Reliability
- High surge current capability
- Solder dip 275 °C max. 7 s, per JESD 22-B106

### Mechanical Data

- **Package:** R-6  
Molding compound meets UL 94 V-0 flammability rating, RoHS-compliant
- **Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102
- **Polarity:** Color band denotes cathode end

### ■ Maximum Ratings (T<sub>a</sub>=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	HER601	HER602	HER603	HER604	HER605	HER606	HER607	HER608
Device marking code			HER601	HER602	HER603	HER604	HER605	HER606	HER607	HER608
Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	V	50	100	200	300	400	600	800	1000
Average Forward Current @60Hz sine wave, Resistance load, T <sub>a</sub> =50°C	I <sub>O</sub>	A	6.0							
Surge(Non-repetitive)Forward Current @60Hz Half-sine wave, 1 cycle, T <sub>a</sub> =25°C	I <sub>FSM</sub>	A	200							
Storage Temperature	T <sub>stg</sub>	°C	-55 ~+150							
Junction Temperature	T <sub>j</sub>	°C	-55~+125							

### ■ Electrical Characteristics (T<sub>a</sub>=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	HER601	HER602	HER603	HER604	HER605	HER606	HER607	HER608
Maximum instantaneous forward voltage drop per diode	V <sub>FM</sub>	V	I <sub>FM</sub> =6.0A	1.0			1.3		1.7		
Maximum DC reverse current at rated DC blocking voltage per diode	I <sub>RRM1</sub>	μA	T <sub>a</sub> =25°C	2.5							
	I <sub>RRM2</sub>		T <sub>a</sub> =100°C	150							
Reverse Recovery time	t <sub>rr</sub>	ns	I <sub>F</sub> =0.5A I <sub>R</sub> =1A I <sub>RR</sub> =0.25A	50					75		
Typical junction capacitance	C <sub>j</sub>	pF	Measured at 1MHZ and Applied Reverse Voltage of 4.0 V.D.C.	100					65		

### ■ Thermal Characteristics (T<sub>a</sub>=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	HER601	HER602	HER603	HER604	HER605	HER606	HER607	HER608
Thermal Resistance(Typical)	R <sub>θJA</sub>	°C/W	10							



# HER601 THRU HER608

## Ordering Information (Example)

PREFERRED P/N	PACKAGE CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
HER601~HER608	D1	Approximate 1.95	500	500	5000	Tape
HER601~HER608	C1	Approximate 1.95	100	100	5000	Bulk

## Characteristics (Typical)

FIG.1: I<sub>o</sub>-T<sub>a</sub> Curve

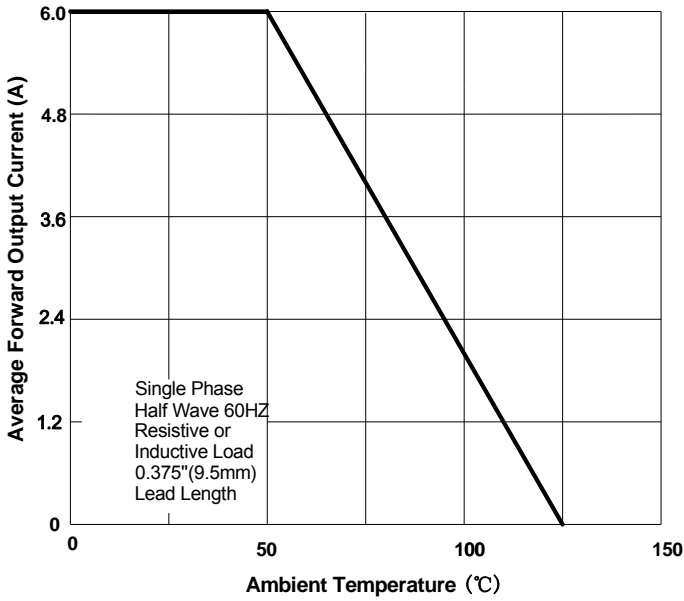


FIG.2: Surge Forward Current Capability

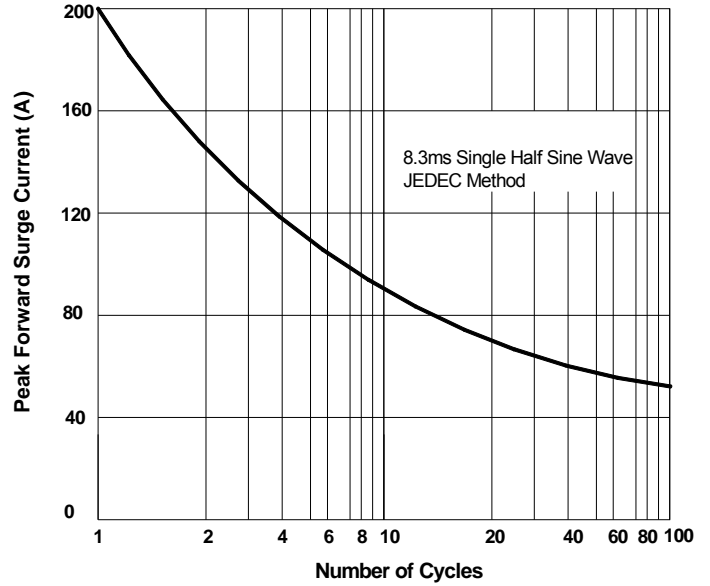


FIG.3: Forward Voltage

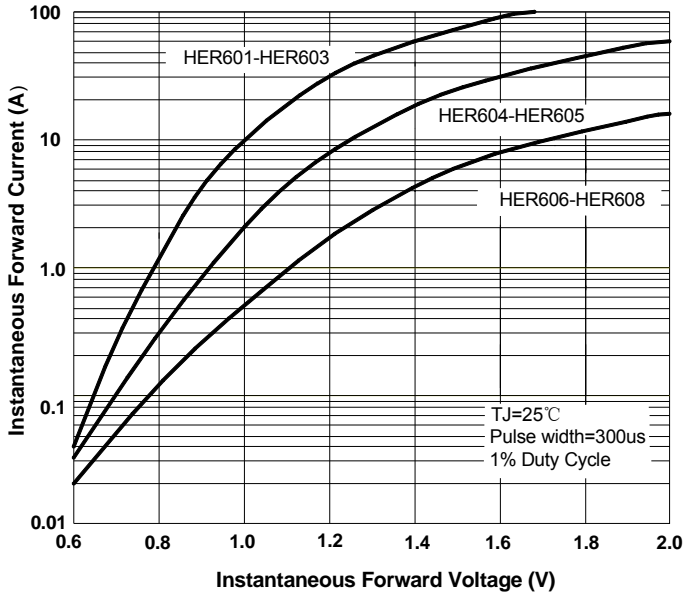
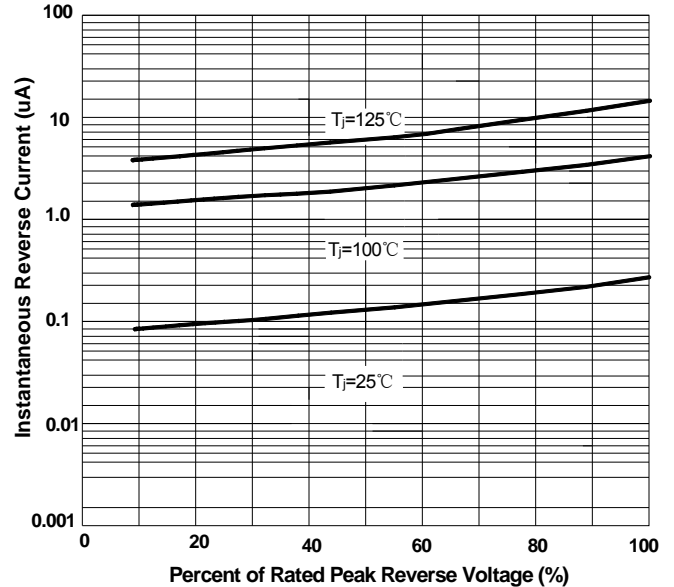


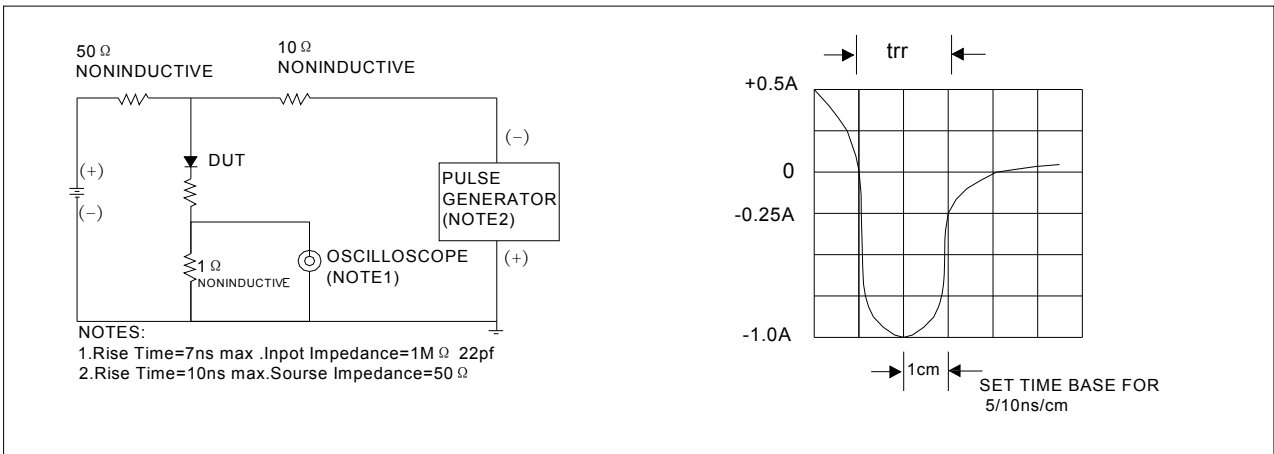
FIG.4: Typical Reverse Characteristics



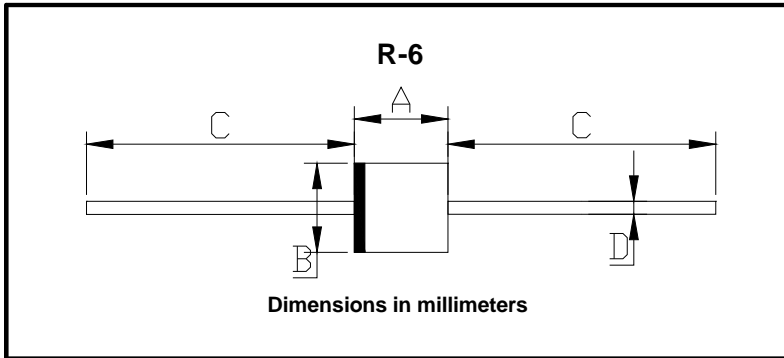


# HER601 THRU HER608

FIG.5: Diagram of circuit and Testing wave form of reverse recovery time



## ■ Outline Dimensions



R-6		
Dim	Min	Max
A	8.60	9.10
B	8.60	9.10
C	25.4	/
D	1.20	1.32



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