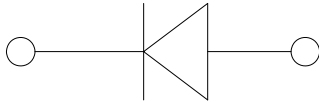
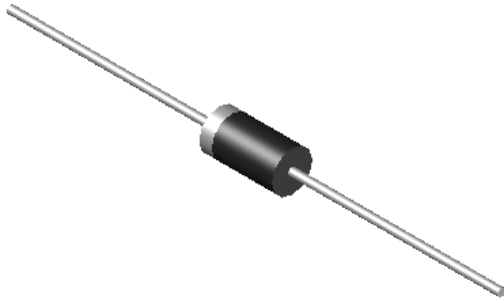


## High Efficient Rectifier



### 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:** DO-201AD(DO-27)  
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	HER501	HER502	HER503	HER504	HER505	HER506	HER507	HER508
Device marking code			HER501	HER502	HER503	HER504	HER505	HER506	HER507	HER508
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	5.0							
Surge(Non-repetitive)Forward Current @60Hz Half-sine wave, 1 cycle, T <sub>a</sub> =25°C	I <sub>FSM</sub>	A	150							
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	HER501	HER502	HER503	HER504	HER505	HER506	HER507	HER508
Maximum instantaneous forward voltage drop per diode	V <sub>FM</sub>	V	I <sub>FM</sub> =5.0A	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>r</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.	85					60		

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

PARAMETER	SYMBOL	UNIT	HER501	HER502	HER503	HER504	HER505	HER506	HER507	HER508
Thermal Resistance(Typical)	R <sub>θJA</sub>	°C/W	15							



# HER501 THRU HER508

## Ordering Information (Example)

PREFERRED P/N	PACKAGE CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
HER501~HER508	D1	Approximate 1.05	1250	1250	12500	Tape
HER501~HER508	C1	Approximate 1.05	250	250	12500	Bulk

## Characteristics (Typical)

FIG.1: Io-Ta Curve

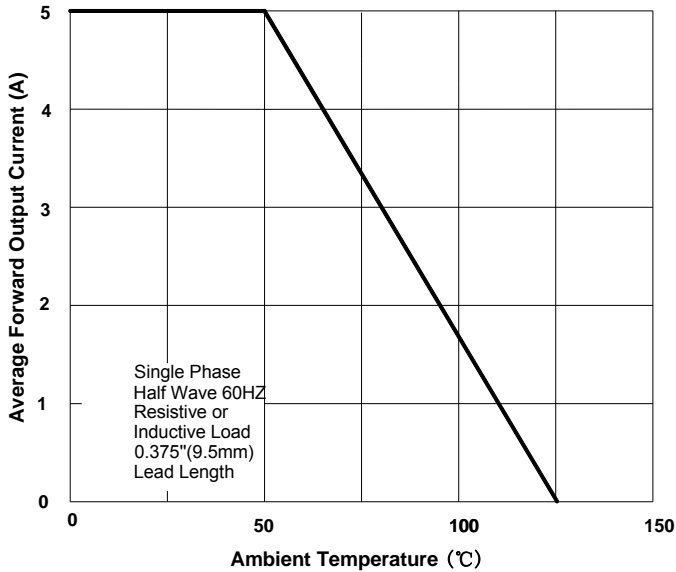


FIG.2: Surge Forward Current Capability

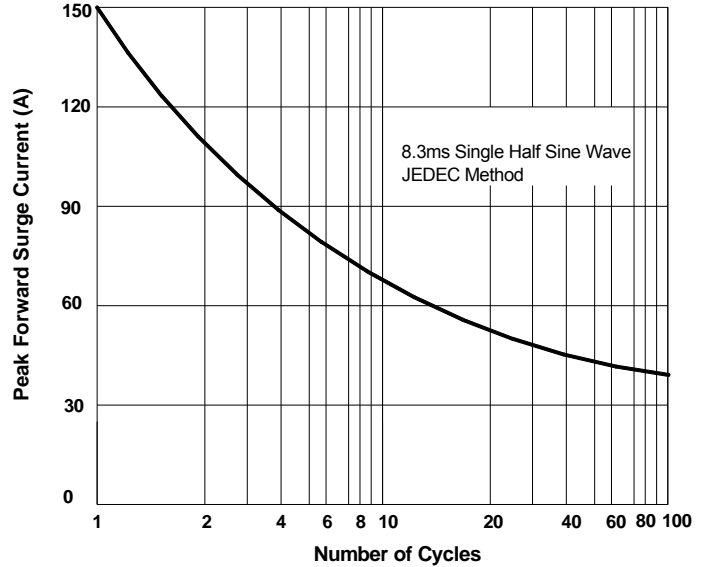


FIG.3: Forward Voltage

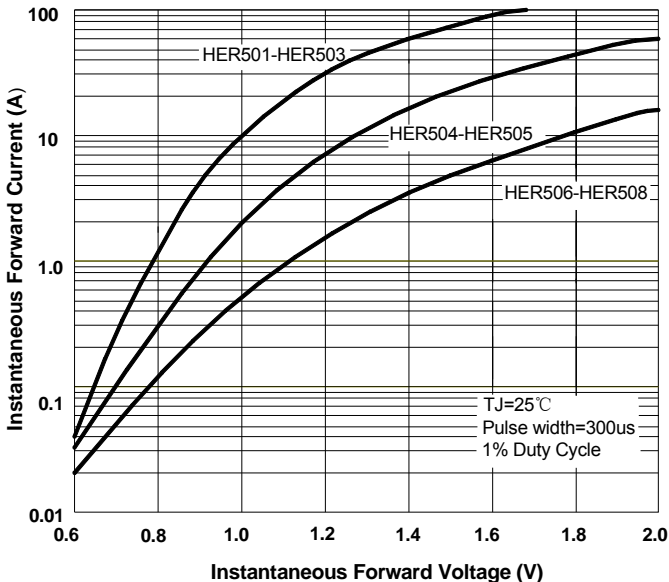


FIG.4: Typical Reverse Characteristics

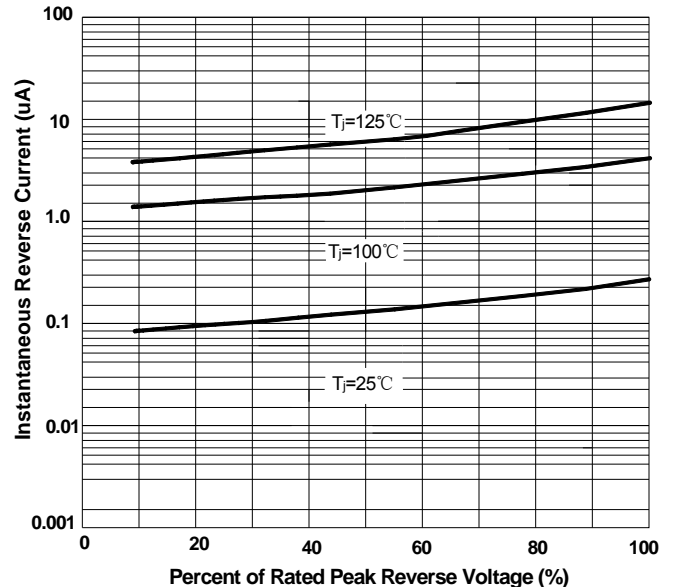
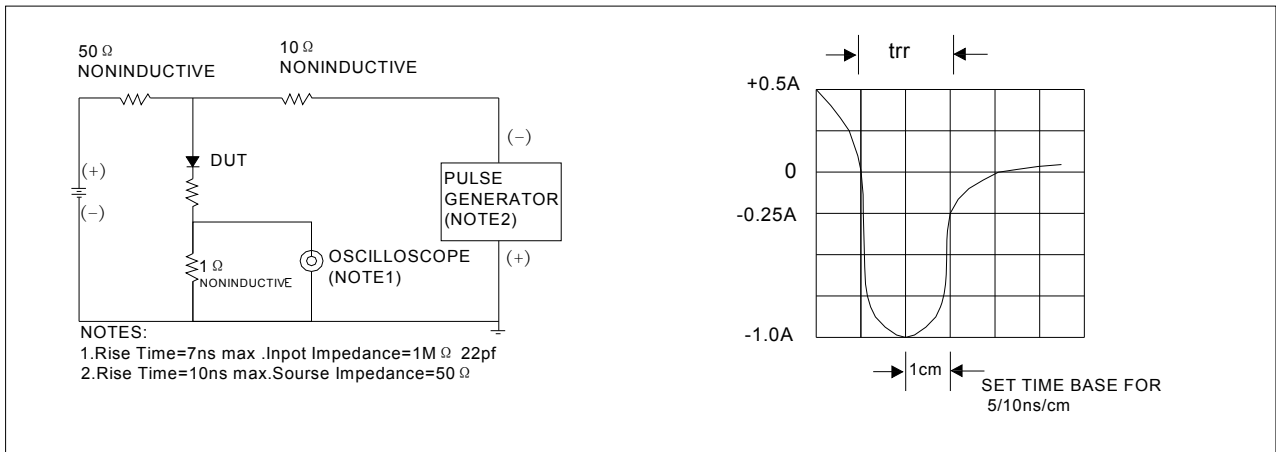
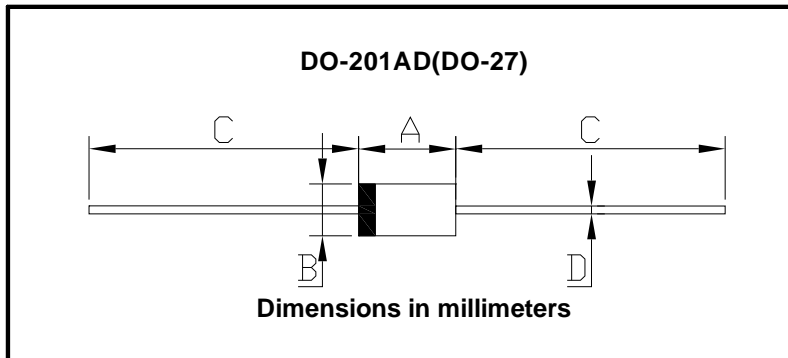


FIG.5: Diagram of circuit and Testing wave form of reverse recovery time



## ■ Outline Dimensions



DO-201AD(DO-27)		
Dim	Min	Max
A	8.50	9.50
B	5.00	5.60
C	25.4	/
D	1.20	1.30



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