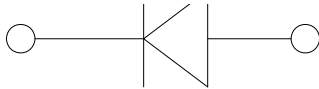
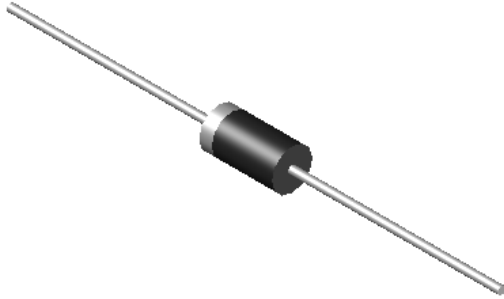


## High Efficient Rectifier



### Features

- High efficiency
- High current capability
- High Reliability
- High surge current capability
- Glass passivated chip junction
- 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 (Ta=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	HER301	HER302	HER303	HER304	HER305	HER306	HER307	HER308
Device marking code			HER301	HER302	HER303	HER304	HER305	HER306	HER307	HER308
Repetitive Peak Reverse Voltage	$V_{RRM}$	V	50	100	200	300	400	600	800	1000
Average Forward Current @60Hz sine wave, Resistance load, Ta=60°C	$I_{F(AV)}$	A	3.0							
Forward Surge Current(Non-repetitive) @60Hz Half-sine wave, 1 cycle, Ta=25°C	$I_{FSM}$	A	125							
Storage Temperature	$T_{stg}$	°C	-55 ~+150							
Junction Temperature	$T_j$	°C	-55~+150							

### ■Electrical Characteristics (Ta=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	HER301	HER302	HER303	HER304	HER305	HER306	HER307	HER308	
Maximum instantaneous forward voltage drop per diode	$V_{FM}$	V	$I_{FM}=3.0A$	1.0			1.3		1.7			
Maximum DC reverse current at rated DC blocking voltage per diode	$I_{RRM1}$	μA	Ta=25°C	2.5								
	$I_{RRM2}$		Ta=100°C	150								
Reverse Recovery time	$t_r$	ns	$I_F=0.5A$ $I_R=1A$ $I_{RR}=0.25A$	50					75			
Typical junction capacitance	$C_j$	pF	Measured at 1MHZ and Applied Reverse Voltage of 4.0 V.D.C.	70					40			

### ■Thermal Characteristics (Ta=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	HER301	HER302	HER303	HER304	HER305	HER306	HER307	HER308
Thermal Resistance(Typical)	$R_{\theta J-A}$	°C/W	30							



# HER301 THRU HER308

## Ordering Information (Example)

PREFERRED P/N	PACKAGE CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
HER301~HER308	D1	Approximate 1.05	1250	1250	12500	Tape
HER301~HER308	C1	Approximate 1.05	250	250	12500	Bulk

## Characteristics (Typical)

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

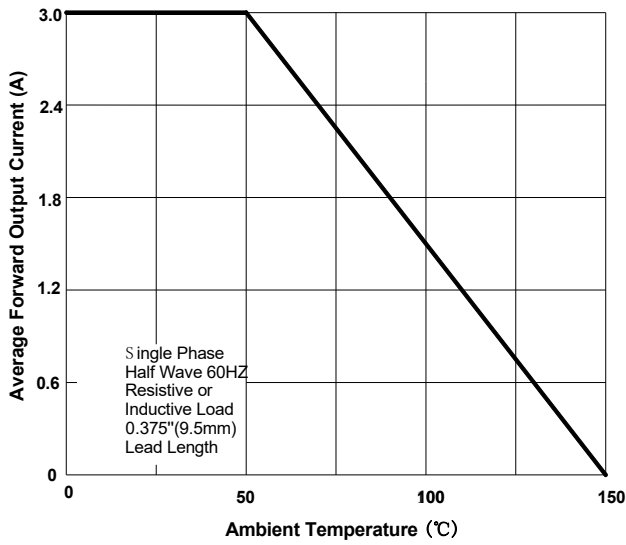


FIG.2: Forward Surge Current Capability

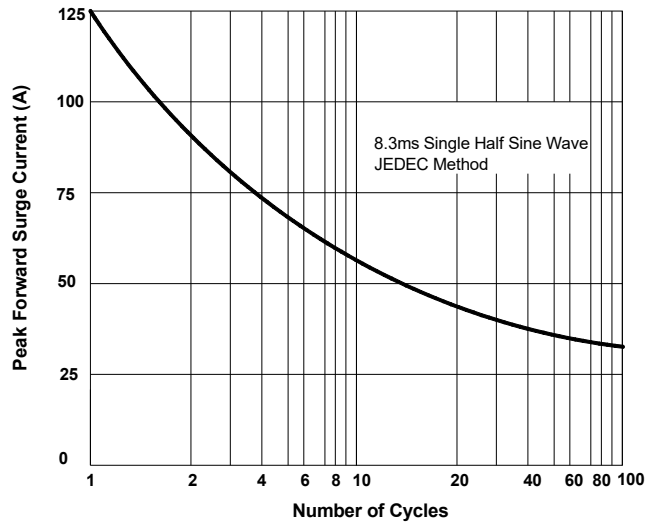


FIG.3: Forward Voltage

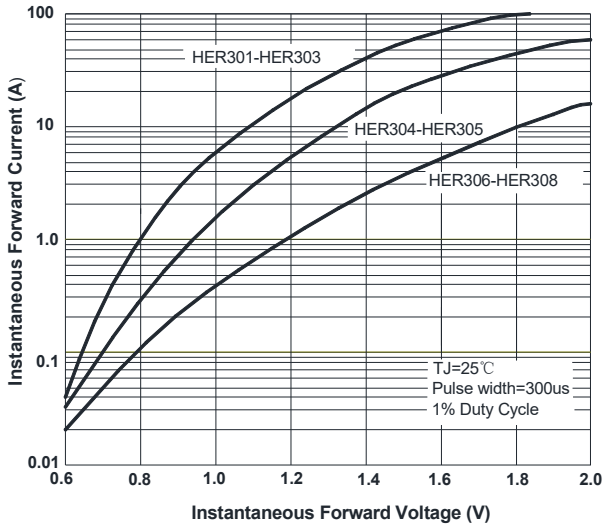
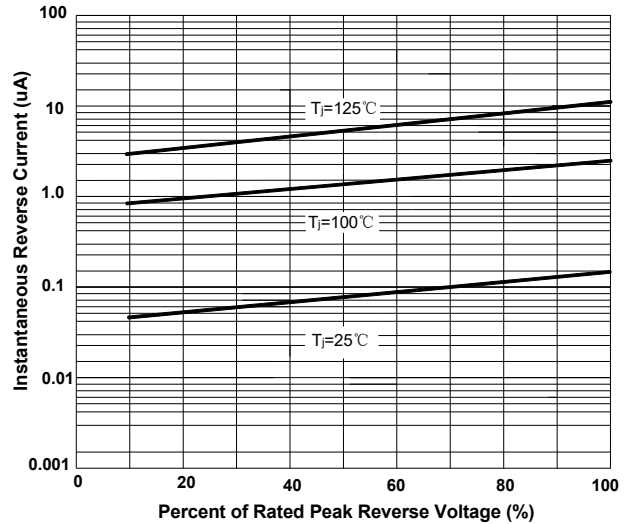


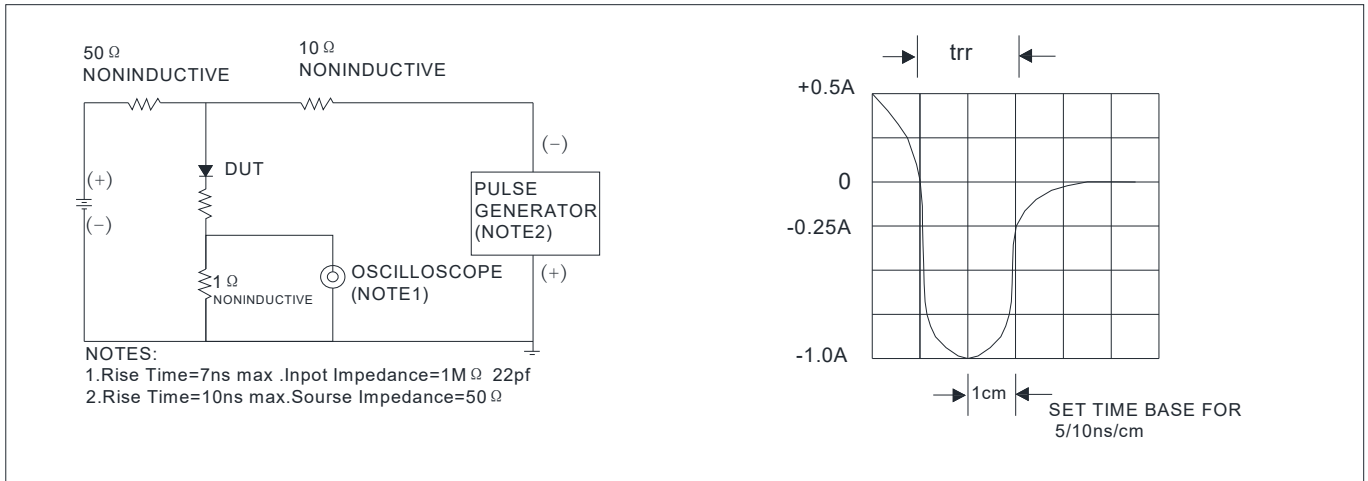
FIG.4: Typical Reverse Characteristics



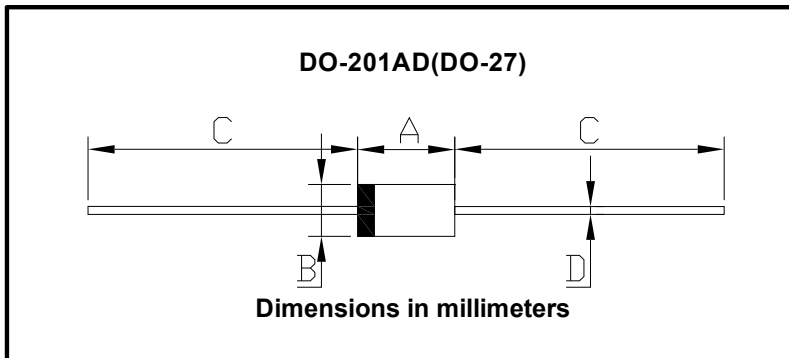


# HER301 THRU HER308

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



## HER301 THRU HER308

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