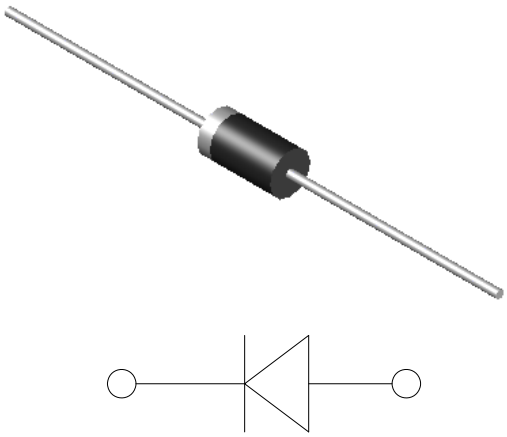
HER501G THRU HER508G

RoHS COMPLIANT

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

yMaximum Ratings (Ta=25 Unless otherwise specified

PARAMETER	SYMBOL	UNIT	HER501G	HER502G	HER503G	HER504G	HER505G	HER506G	HER507G	HER508G
Device marking code			HER501G	HER502G	HER503G	HER504G	HER505G	HER506G	HER507G	HER508G
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	V	50	100	200	300	400	600	800	1000
Maximum RMS Voltage	V_{RMS}	V	35	70	140	210	280	420	560	700
Maximum DC blocking Voltage	V_{DC}	V	50	100	200	300	400	600	800	1000
Average Forward Current @60Hz sine wave, Resistance load, Ta=50	$I_{F(AV)}$	A	5.0							
Forward Surge Current (Non-repetitive) @60Hz Half-sine wave,1 cycle, Tj=25	I_{FSM}	A	150							
Forward Surge Current (Non-repetitive) @1ms, square wave, 1 cycle, Tj=25			300							
Current squared time @1ms≤t8.3≤ms Tj=25 Rating of per diode	I^2t	A^2s	94							
Typical junction capacitance @Measured at 1MHz and Applied Reverse Voltage of 4.0 V.D.C	Cj	pF	72			46		52		
Storage Temperature	T_{stg}		-55 ~ +150							
Junction Temperature	T_j		-55 ~ +150							

■Electrical Characteristics T_a=25 Unless otherwise specified

PARAMETER	SYMBOL					HER503G	HER504G	HER505G	HER506G	HER507G	HER508G
Maximum instantaneous forward voltage drop per diode	VF	V	I_{FM}=5.0A		1.0		1.3		1.7		
Maximum DC reverse current at rated DC blocking voltage per diode	I_R	μA	T_j =25		2.5						
			T_j =125		100						
Maximum reverse recovery time	t_{rr}	ns	I_F=0.5A,I_R=1.0A, I_{rr}=0.25A		50				75		

■Thermal Characteristics T_a=25 Unless otherwise specified

PARAMETER	SYMBOL	UNIT	HER501G	HER502G	HER503G	HER504G	HER505G	HER506G	HER507G	HER508G
Typical Thermal Resistance	$R_{\theta J-A}$	/W	20							

■Ordering Information (Example)

PREFERED P/N	PACKAGE CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
HER501G~HER508G	D1	Approximate 1.05	1250	1250	12500	Tape
HER501G~HER508G	C1	Approximate 1.05	250	250	12500	Bulk

■ Characteristics (Typical)

FIG.3: Forward Voltage

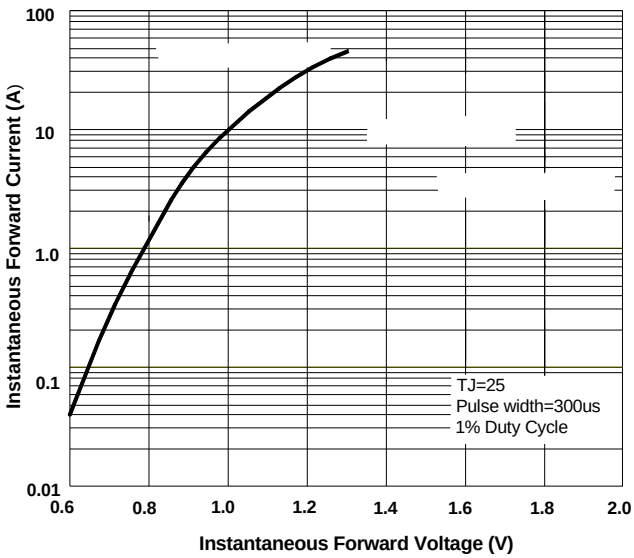
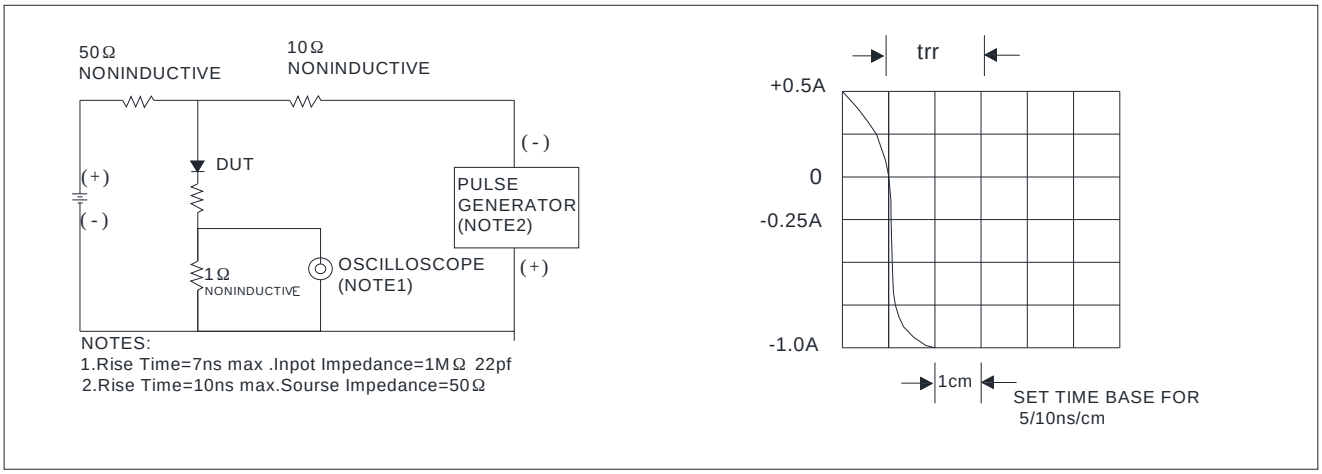
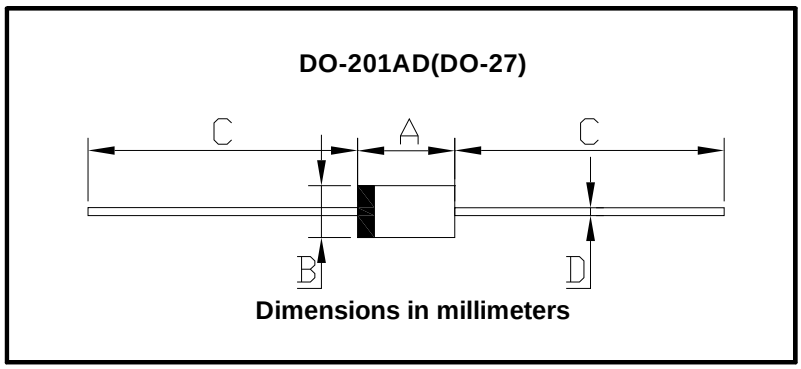


FIG.5: Diagram of circuit and Testing wave form of reverse recovery time



■ 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

Disclaimer

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