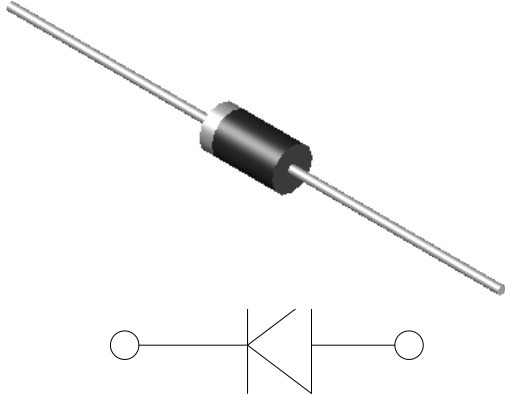




High Efficient Rectifier



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	HER501 G	HER502 G	HER503 G	HER504 G	HER505 G	HER506 G	HER507 G	HER508 G
Device marking code			HER501 G	HER502 G	HER503 G	HER504 G	HER505 G	HER506 G	HER507 G	HER508 G
Repetitive Peak Reverse Voltage	V_{RRM}	V	50	100	200	300	400	600	800	1000
Average Forward Current @60Hz sine wave, Resistance load, Ta=50°C	$I_{F(AV)}$	A	5.0							
Forward Surge Current(Non-repetitive) @60Hz Half-sine wave, 1 cycle, Ta=25°C	I_{FSM}	A	150							
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	HER501 G	HER502 G	HER503 G	HER504 G	HER505 G	HER506 G	HER507 G	HER508 G
Maximum instantaneous forward voltage drop per diode	V _{FM}	V	I _{FM} =5.0A	1.0			1.3		1.7		
Maximum DC reverse current at rated DC blocking voltage per diode	I _{RRM1}	μA	T _a =25°C	2.5							
	I _{RRM2}		T _a =100°C	150							
Reverse Recovery time	t _{rr}	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.	85					60		

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

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



HER501G THRU HER508G

■ Ordering Information (Example)

PREFERRED 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.1: I_o - T_a Curve

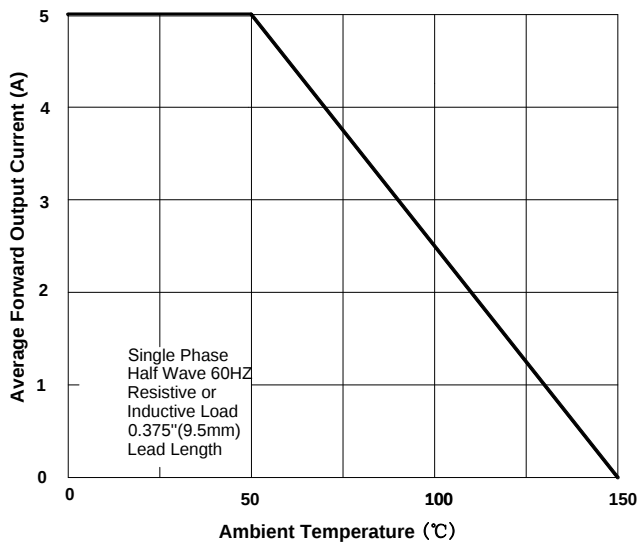


FIG.2: Forward Surge Current Capability

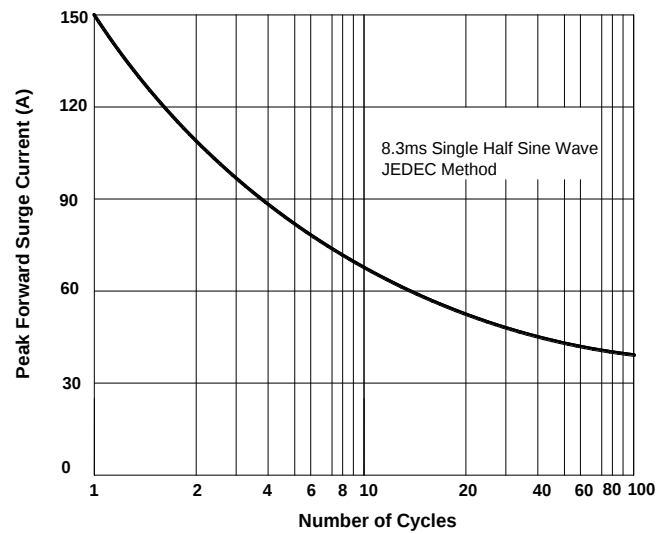


FIG.3: Forward Voltage

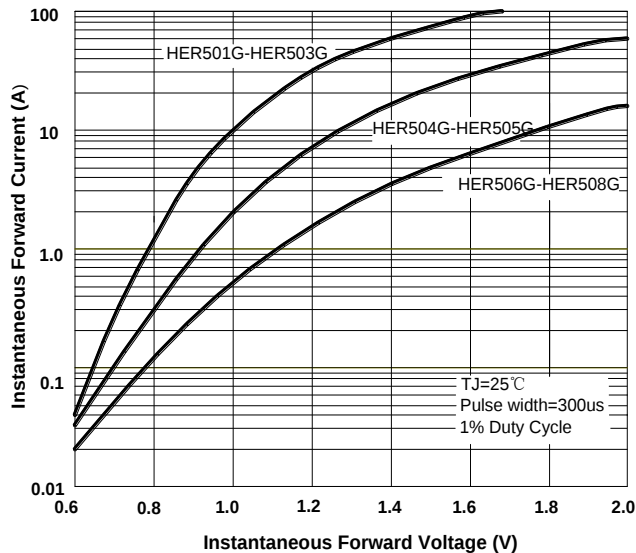
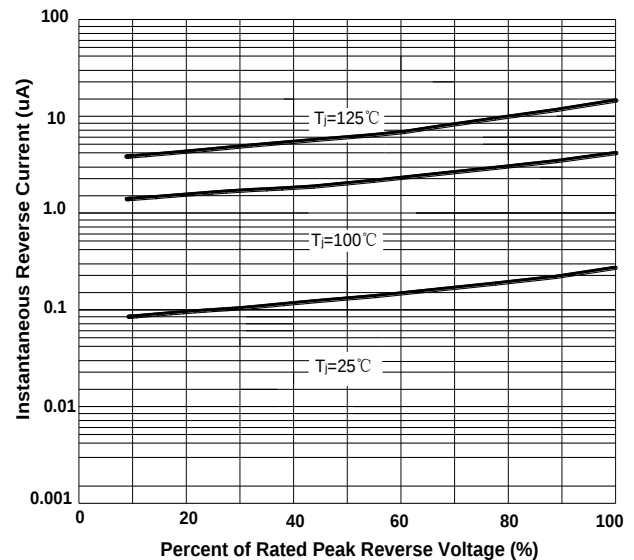


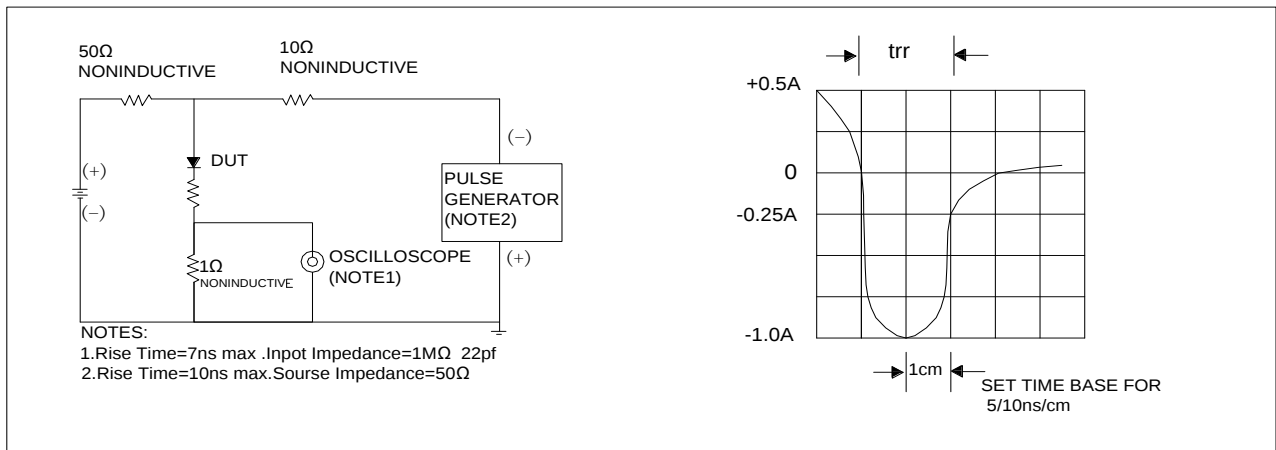
FIG.4: Typical Reverse Characteristics



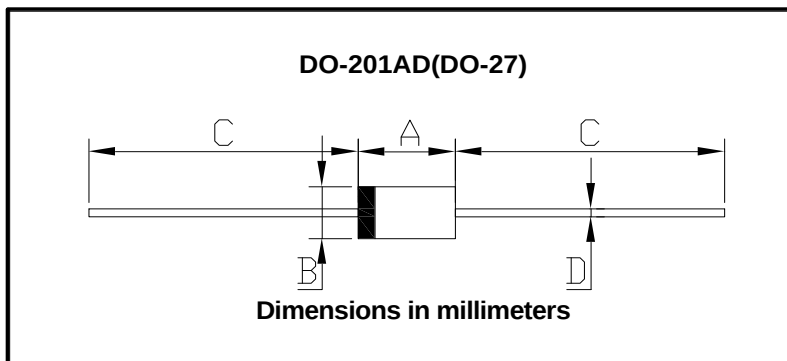


HER501G THRU HER508G

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



HER501G THRU HER508G

Disclaimer

The information presented in this document is for reference only. Yangzhou Yangjie Electronic Technology Co., Ltd. reserves the right to make changes without notice for the specification of the products displayed herein to improve reliability, function or design or otherwise.

The product listed herein is designed to be used with ordinary electronic equipment or devices, and not designed to be used with equipment or devices which require high level of reliability and the malfunction of which would directly endanger human life (such as medical instruments, transportation equipment, aerospace machinery, nuclear-reactor controllers, fuel controllers and other safety devices), Yangjie or anyone on its behalf, assumes no responsibility or liability for any damages resulting from such improper use of sale.

This publication supersedes & replaces all information previously supplied. For additional information, please visit our website [http:// www.21yangjie.com](http://www.21yangjie.com) , or consult your nearest Yangjie's sales office for further assistance.