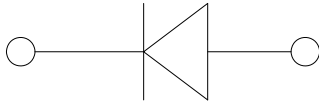
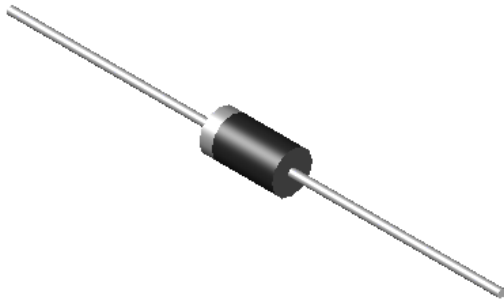




HER501-508



- 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

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

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

Parameter	Symbol	Unit	HER501	HER502	HER503	HER504	HER505	HER506	HER507	HER508
Device marking code			G	G	G	G	G	G	G	G
Maximum Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	V	50	100	200	300	400	600	800	1000
Maximum RMS Voltage	V <sub>RMS</sub>	V	35	70	140	210	280	420	560	700
Maximum DC blocking Voltage	V <sub>DC</sub>	V	50	100	200	300	400	600	800	1000
Average Forward Current @60Hz sine wave, Resistance load, Ta=50	I <sub>F(AV)</sub>	A	5.0							
Forward Surge Current (Non-repetitive) @60Hz Half-sine wave, 1 cycle, Tj=25	I <sub>FSM</sub>	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 <sup>2</sup> t	A <sup>2</sup> s	94							
Typical junction capacitance @Measured at 1MHz and Applied Reverse Voltage of 4.0 V.D.C	C <sub>j</sub>	pF	72			46		52		
Storage Temperature	T <sub>stg</sub>		-55 ~ +150							
Junction Temperature	T <sub>j</sub>		-55 ~ +150							

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

Parameter	Symbol	Unit	HER501	HER502	HER503	HER504	HER505	HER506	HER507	HER508
Maximum instantaneous forward voltage drop per diode	V <sub>F</sub>	V	IFM=5.0A			1.0		1.3		1.7
Maximum DC reverse current at rated DC blocking voltage per diode	I <sub>R</sub>	μA	Tj=25			2.5				
			Tj=125			100				
Maximum reverse recovery time	t <sub>rr</sub>	ns	I <sub>F</sub> =0.5A, I <sub>R</sub> =1.0A, I <sub>r</sub> =0.25A			50		75		



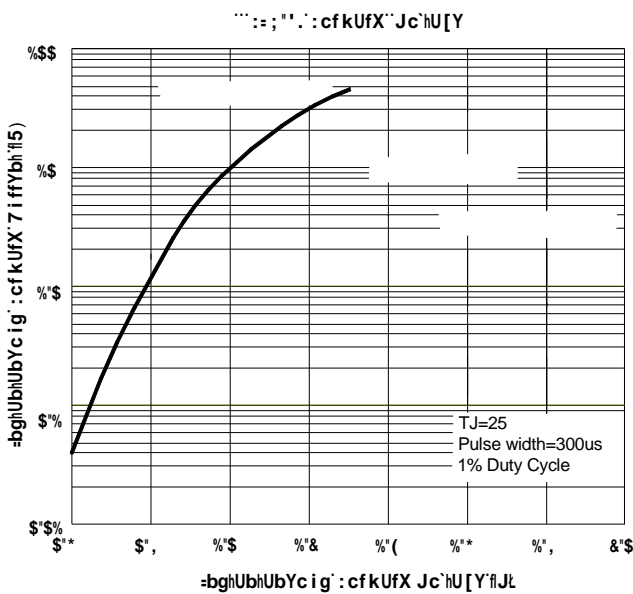
Unless otherwise specified  $T_a=25$

Parameter	Symbol	Unit	Value
Typical Thermal Resistance	$R_{JA}$	/W	20

Electrical Characteristics

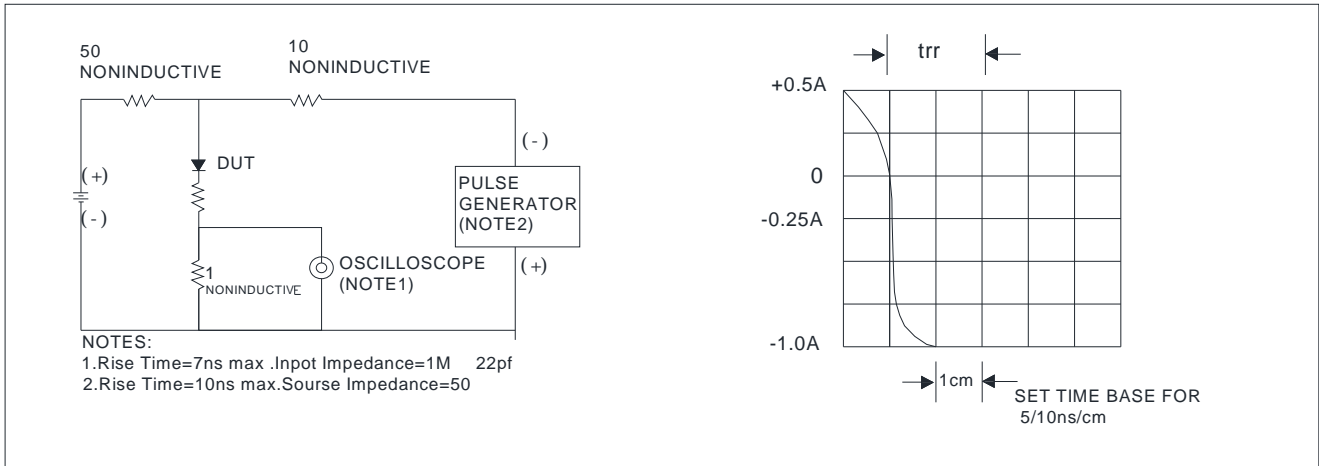
Parameter	Symbol	Unit	Value	Test Conditions	Package
Propagation Delay	$t_{pd}$	ns	1.05	V <sub>OH</sub> =2.4V, V <sub>OL</sub> =0.4V	Tape
Setup Time	$t_{su}$	ns	250	V <sub>OH</sub> =2.4V, V <sub>OL</sub> =0.4V	Bulk

Timing Diagram

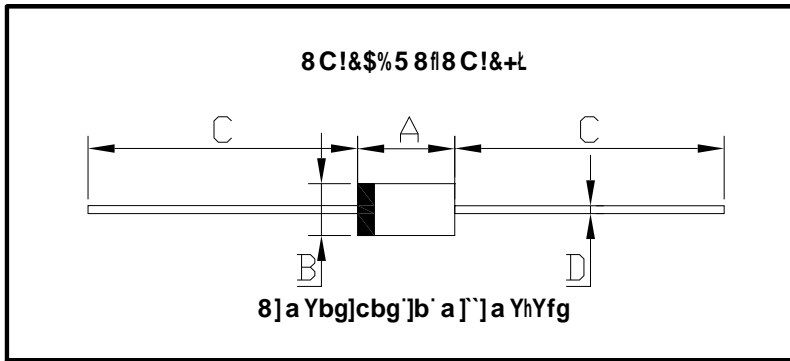




:: ; ) . '8]U[ fUa 'cZ'W]fWi]h'UbX'HYgh]b[ 'kUjY'Zcf a 'cZ'fYjYfgY'fYwc jYfm'h]a Y



C i h`bY'8]a Ybg]cbg`



8C!&\$%58f8C!&+L		
Dim	Min	Max
A	8.50	9.50
B	5.00	5.60
C	25.4	/
D	1.20	1.30



8]gW^U] a Yf'

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 others. Ä Ä pr E oq%ww 4 e` h E