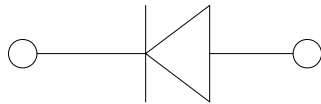




High Efficient Rectifier



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-204AL(DO-41)
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_a=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	HER101	HER102	HER103	HER104	HER105	HER106	HER107	HER108
Device marking code			HER101	HER102	HER103	HER104	HER105	HER106	HER107	HER108
Repetitive Peak Reverse Voltage	V _{RRM}	V	50	100	200	300	400	600	800	1000
Average Forward Current @60Hz sine wave, Resistance load, T _a =50°C	I _O	A	1.0							
Surge(Non-repetitive)Forward Current @60Hz Half-sine wave, 1 cycle, T _a =25°C	I _{FSM}	A	30							
Storage Temperature	T _{stg}	°C	-55 ~+150							
Junction Temperature	T _j	°C	-55~+125							

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

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	HER101	HER102	HER103	HER104	HER105	HER106	HER107	HER108
Maximum instantaneous forward voltage drop per diode	V _{FM}	V	IFM=1.0A	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.	20					15		

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

PARAMETER	SYMBOL	UNIT	HER101	HER102	HER103	HER104	HER105	HER106	HER107	HER108
Thermal Resistance(Typical)	R _{θJA}	°C/W	50							



HER101 THRU HER108

■ Ordering Information (Example)

PREFERRED P/N	PACKAGE CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
HER101~HER108	D1	Approximate 0.27	5000	5000	50000	Tape
HER101~HER108	C1	Approximate 0.27	1000	1000	50000	Bulk

■ Characteristics (Typical)

FIG.1: I_o - T_a Curve

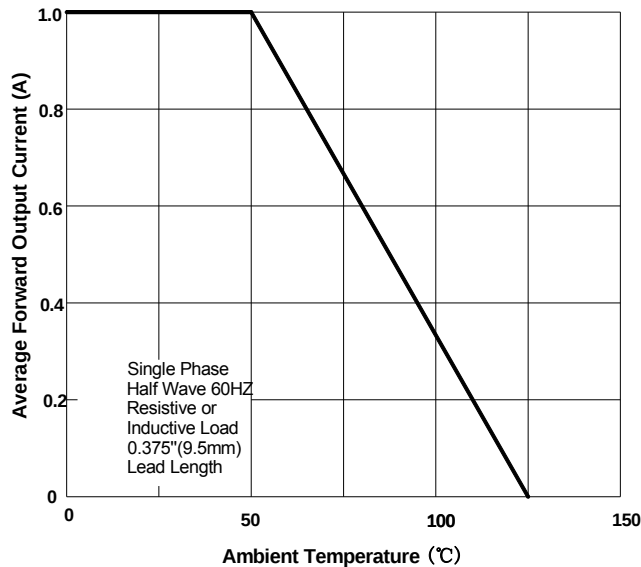


FIG.2: Surge Forward Current Capability

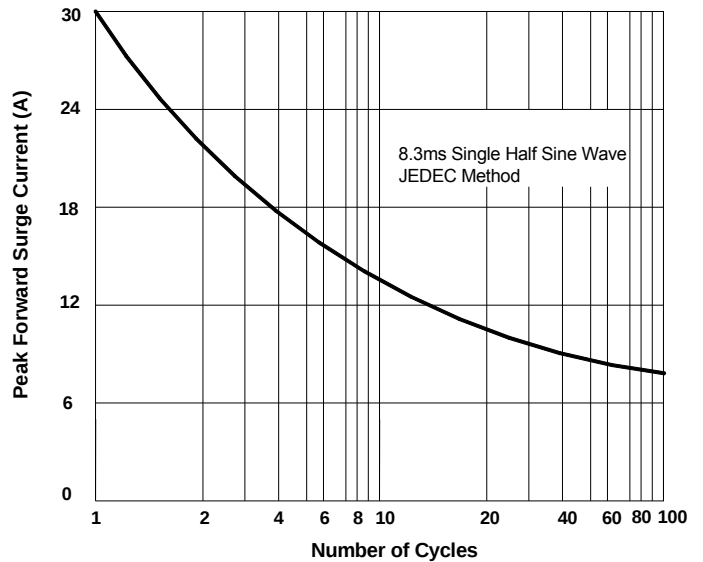


FIG.3: Forward Voltage

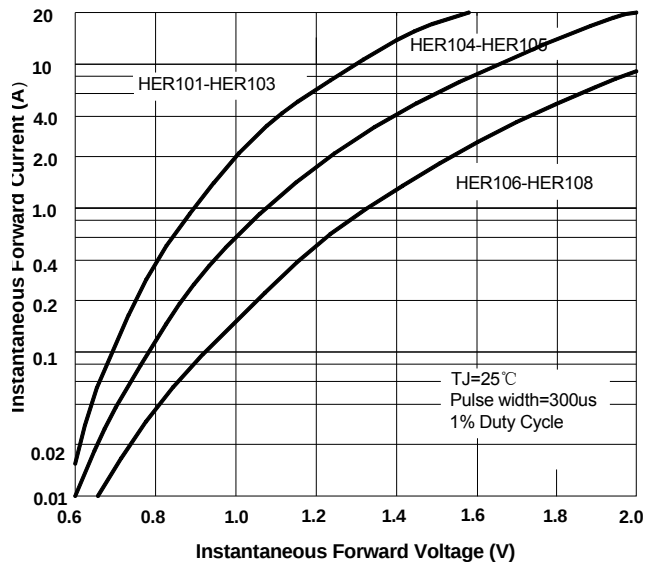
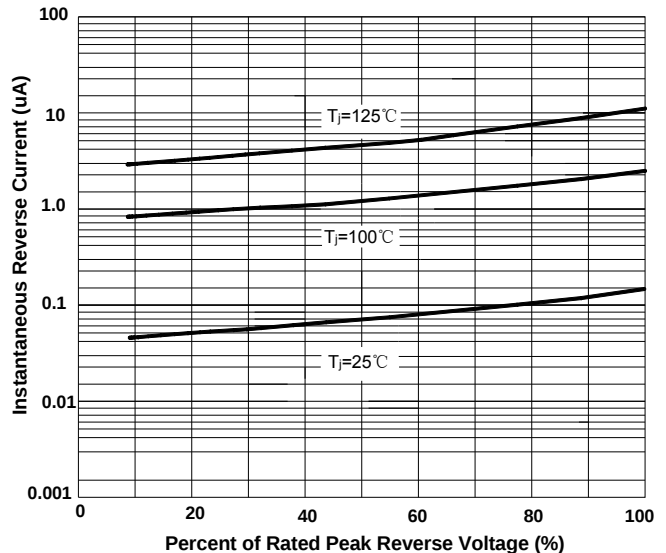


FIG.4: Typical Reverse Characteristics





The circuit diagram shows a diode (DUT) in series with a 50 Ω noninductive resistor and a 10 Ω noninductive resistor. A 1 Ω noninductive resistor is connected in parallel with the diode. A pulse generator (NOTE 2) is connected to the 10 Ω resistor, and an oscilloscope (NOTE 1) is connected across the 1 Ω resistor. The oscilloscope trace shows a current pulse with a rise time of 7 ns and a fall time of 10 ns. The current levels are +0.5 A and -1.0 A. The time base is set to 5/10 ns/cm.

DO-204AL(DO-41)

Dimensions in millimeters

DO-204AL(DO-41)		
Dim	Min	Max
A	4.22	5.21
B	2.03	2.72
C	25.4	/
D	0.69	0.86



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.