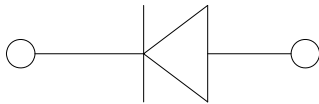


High Efficient Rectifier



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-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 (Ta=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, Ta=75°C	$I_{F(AV)}$	A	1.0							
Forward Surge Current (Non-repetitive) @60Hz Half-sine wave, 1 cycle, Ta=25°C	I_{FSM}	A	30							
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	HER101	HER102	HER103	HER104	HER105	HER106	HER107	HER108	
Maximum instantaneous forward voltage drop per diode	V_{FM}	V	$I_{FM}=1.0A$	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.	20					10			

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

PARAMETER	SYMBOL	UNIT	HER101	HER102	HER103	HER104	HER105	HER106	HER107	HER108
Thermal Resistance(Typical)	$R_{\theta J-A}$	°C/W	60							



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 0.30	5000	5000	50000	Tape
HER101~HER108	C1	Approximate 0.30	1000	1000	50000	Bulk

Characteristics (Typical)

FIG.1: I_o - T_a Curve

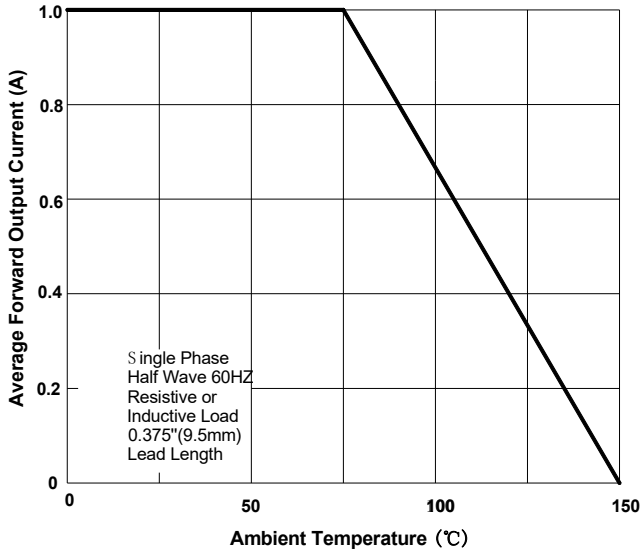


FIG.2: Forward Surge Current Capability

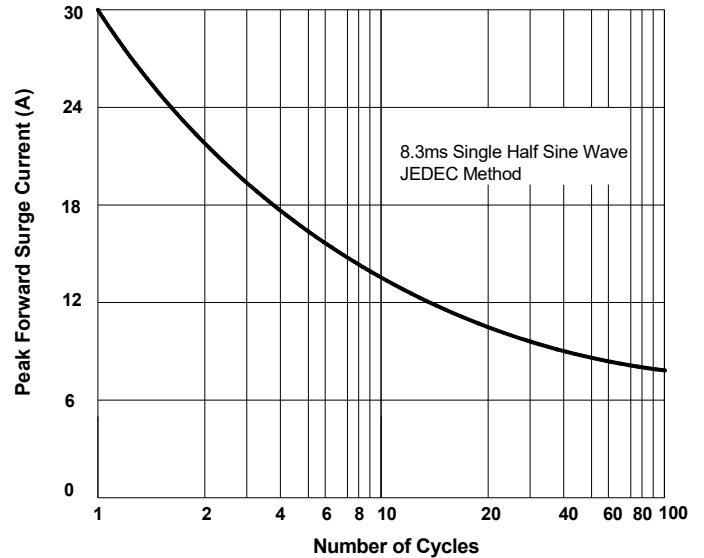


FIG.3: Forward Voltage

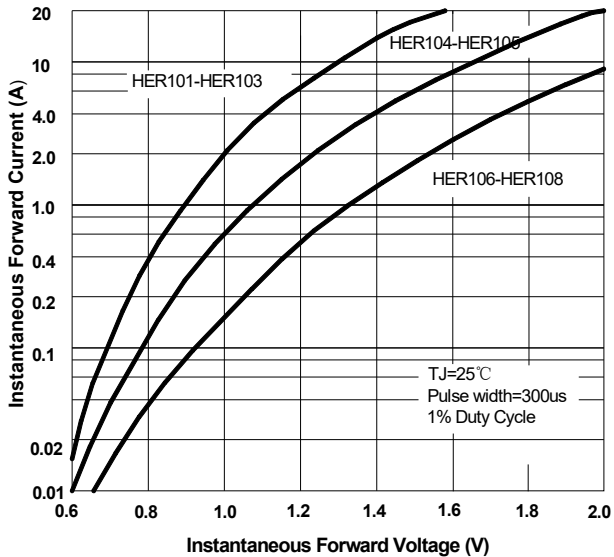


FIG.4: Typical Reverse Characteristics

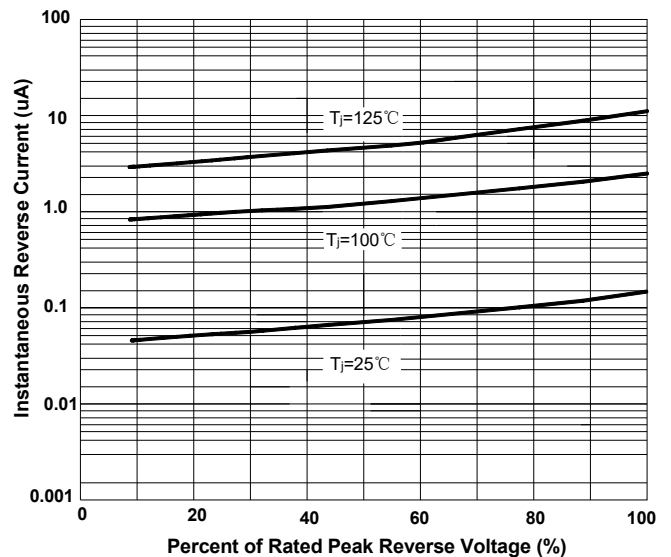
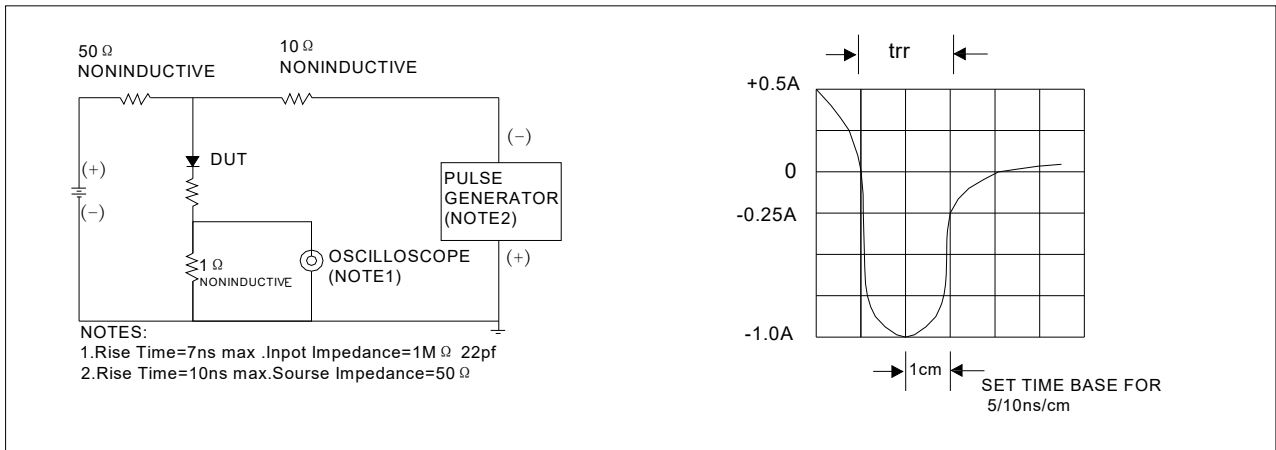
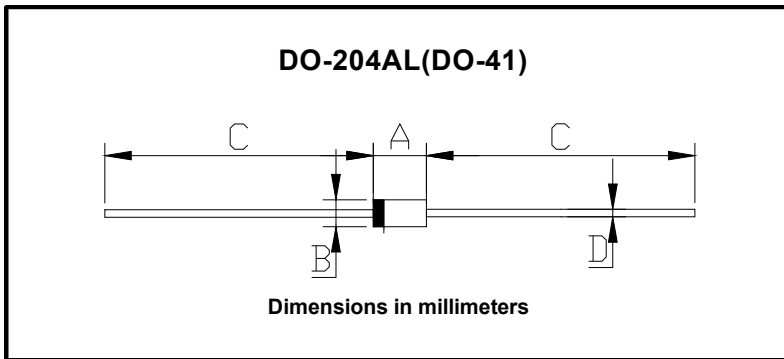


FIG.5: Diagram of circuit and Testing wave form of reverse recovery time



■ Outline Dimensions



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



HER101 THRU HER108

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