

### 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 (T<sub>a</sub>=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	HER101 G	HER102 G	HER103 G	HER104 G	HER105 G	HER106 G	HER107 G	HER108 G
Device marking code			HER101 G	HER102 G	HER103 G	HER104 G	HER105 G	HER106 G	HER107 G	HER108 G
Maximum Repetitive Peak Reverse Voltage	VRRM	V	50	100	200	300	400	600	800	1000
Maximum RMS Voltage	VRMS	V	35	70	140	210	280	420	560	700
Maximum DC blocking Voltage	VDC	V	50	100	200	300	400	600	800	1000
Average Forward Current @60Hz sine wave, Resistance load, T <sub>a</sub> =75°C	I <sub>F(AV)</sub>	A	1.0							
Forward Surge Current (Non-repetitive) @60Hz Half-sine wave, 1 cycle, T <sub>j</sub> =25°C	I <sub>FSM</sub>	A	30							
Forward Surge Current (Non-repetitive) @1ms, square wave, 1 cycle, T <sub>j</sub> =25°C			60							
Current squared time @1ms≤t≤8.3ms T <sub>j</sub> =25°C, Rating of per diode	I <sup>2</sup> t	A <sup>2</sup> s	3.735							
Typical junction capacitance @Measured at 1MHz and Applied Reverse Voltage of 4.0 V.D.C	C <sub>j</sub>	pF	15			13		8		
Storage Temperature	T <sub>stg</sub>	°C	-55 ~ +150							
Junction Temperature	T <sub>j</sub>	°C	-55 ~ +150							

### ELECTRICAL CHARACTERISTICS (T<sub>a</sub>=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	HER101 G	HER102 G	HER103 G	HER104 G	HER105 G	HER106 G	HER107 G	HER108 G
Maximum instantaneous forward voltage drop per diode	V <sub>F</sub>	V	I <sub>FM</sub> =1.0A	1.0			1.3		1.7		
Maximum DC reverse current at rated DC blocking voltage per diode	I <sub>R</sub>	μA	T <sub>j</sub> =25°C	2.5							
			T <sub>j</sub> =125°C	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		

### ■ THERMAL CHARACTERISTICS (T<sub>a</sub>=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	HER101G	HER102G	HER103G	HER104G	HER105G	HER106G	HER107G	HER108G
Typical Thermal Resistance	R <sub>θJ-A</sub>	°C/W	60							

### ■ PACKAGING INFORMATION

PREFERRED P/N	PACKAGE CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
HER101G~HER108G	D1	Approximate 0.30	5000	5000	50000	Tape
HER101G~HER108G	C1	Approximate 0.30	1000	1000	50000	Bulk

### ■ CHARACTERISTICS (TYPICAL)

FIG.1: I<sub>o</sub>-T<sub>a</sub> Curve

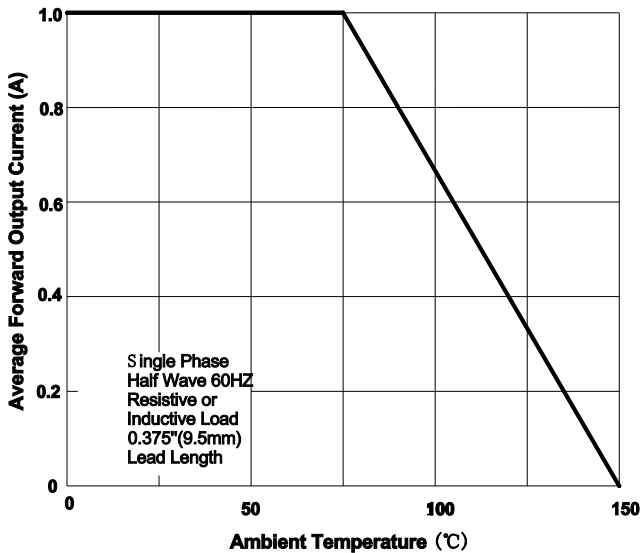


FIG.2: Forward Surge Current Capability

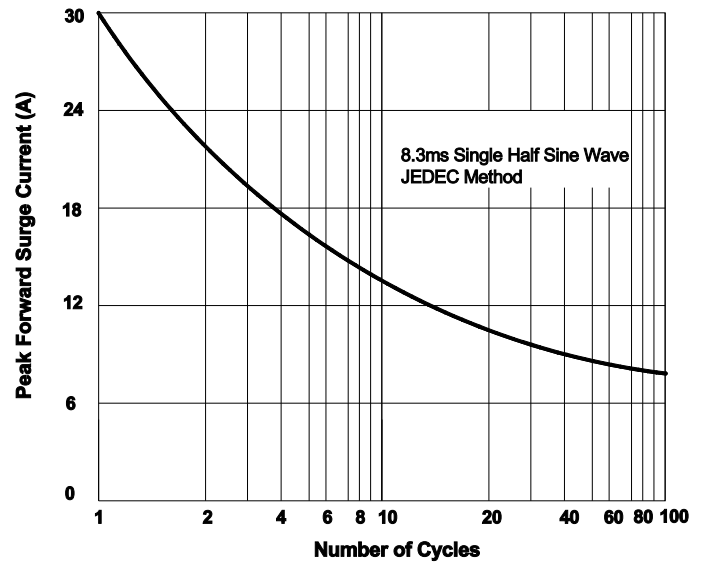


FIG.3: Forward Voltage

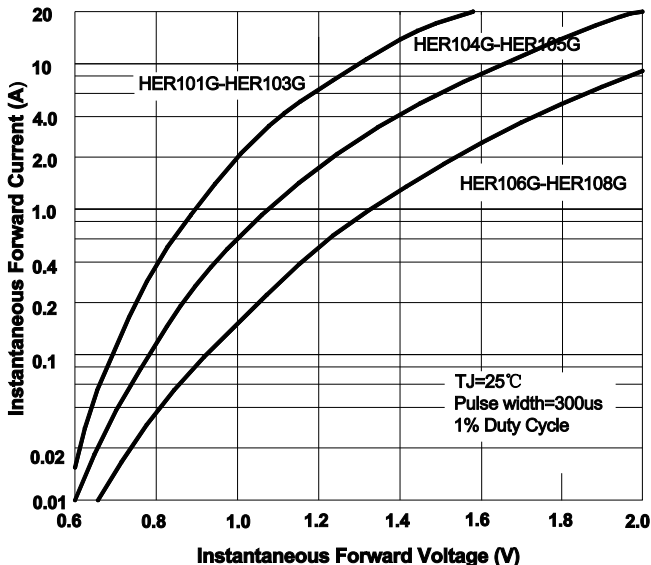


FIG.4: Typical Reverse Characteristics

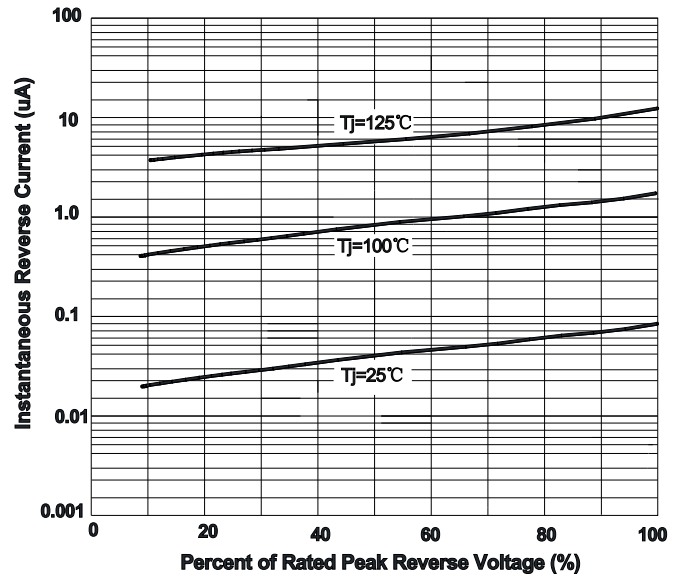
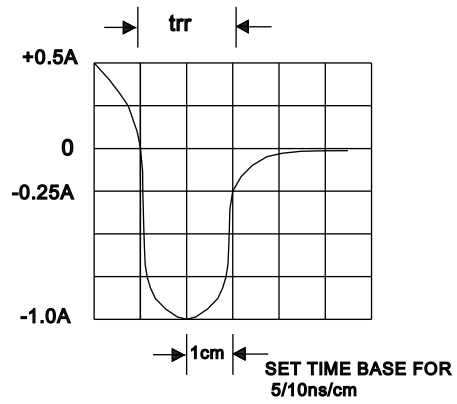
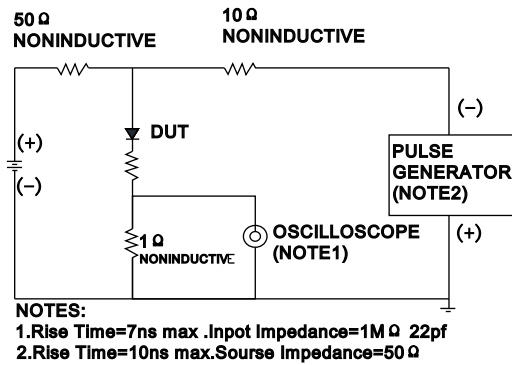
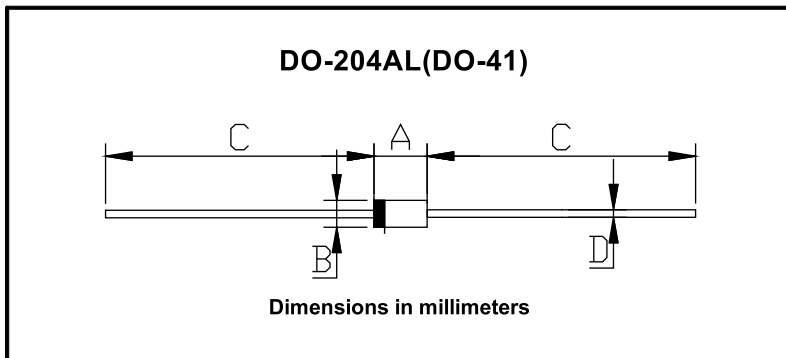


FIG.5: Diagram of circuit and Testing wave form of reverse recovery time



■ **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