

### 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-204AC(DO-15)  
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	HER151 G	HER152 G	HER153 G	HER154 G	HER155 G	HER156 G	HER157 G	HER158 G
Device marking code			HER151 G	HER152 G	HER153 G	HER154 G	HER155 G	HER156 G	HER157 G	HER158 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, T <sub>a</sub> =75°C	I <sub>F(AV)</sub>	A	1.5							
Forward Surge Current (Non-repetitive) @60Hz Half-sine wave, 1 cycle, T <sub>j</sub> =25°C	I <sub>FSM</sub>	A	60							
Forward Surge Current (Non-repetitive) @1ms, square wave, 1 cycle, T <sub>j</sub> =25°C			100							
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	15							
Typical junction capacitance @Measured at 1MHz and Applied Reverse Voltage of 4.0 V.D.C	C <sub>j</sub>	pF	28			17		12		
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	HER151 G	HER152 G	HER153 G	HER154 G	HER155 G	HER156 G	HER157 G	HER158 G
Maximum instantaneous forward voltage drop per diode	V <sub>F</sub>	V	I <sub>FM</sub> =1.5A	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** ( $T_a=25^{\circ}\text{C}$  Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	HER151G	HER152G	HER153G	HER154G	HER155G	HER156G	HER157G	HER158G
Typical Thermal Resistance	$R_{\theta J-A}$	$^{\circ}\text{C/W}$	40							

■ **PACKAGING INFORMATION**

PREFERRED P/N	PACKAGE CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
HER151G~HER158G	D1	Approximate 0.38	3000	3000	30000	Tape
HER151G~HER158G	C1	Approximate 0.38	500	500	25000	Bulk

■ **CHARACTERISTICS (TYPICAL)**

FIG.1:  $I_o$ - $T_a$  Curve

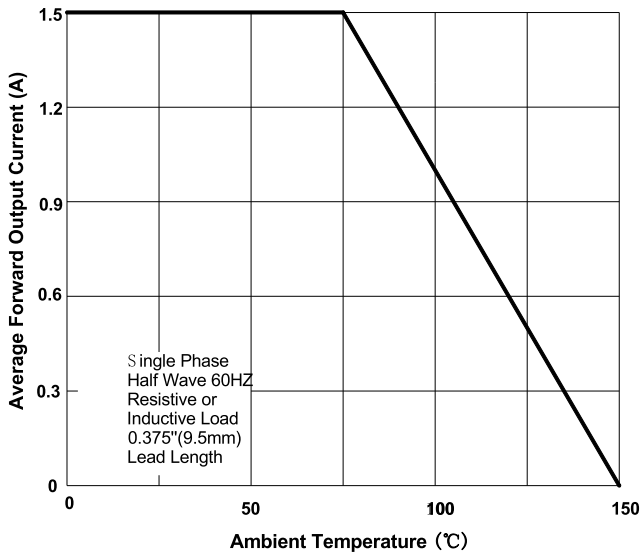


FIG.2: Forward Surge Current Capability

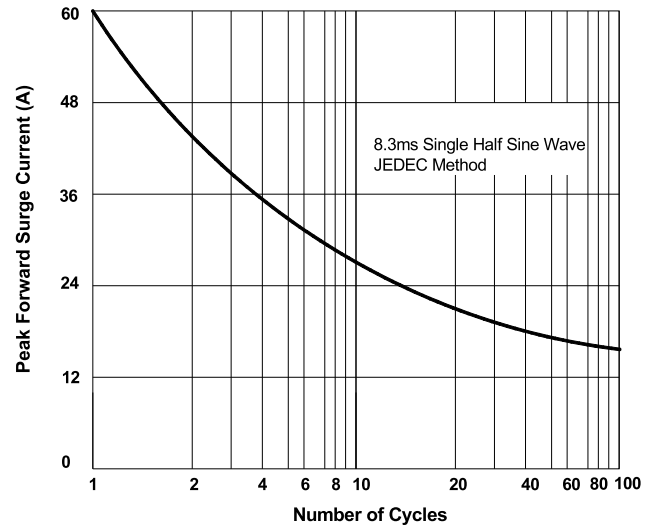


FIG.3: Forward Voltage

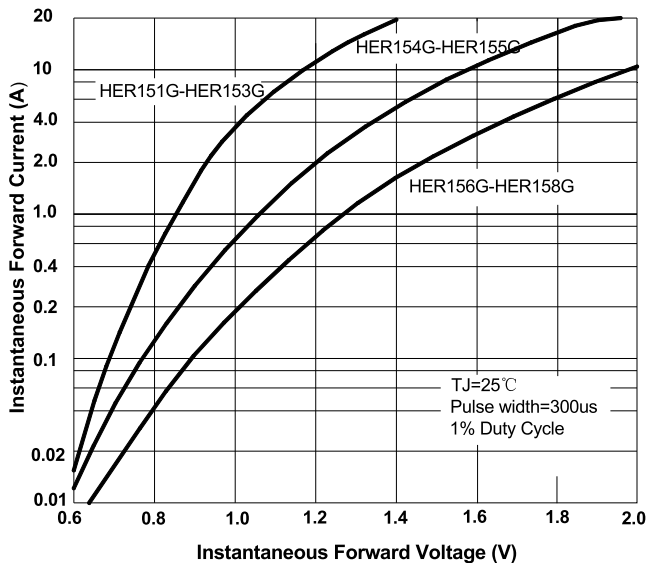


FIG.4: Typical Reverse Characteristics

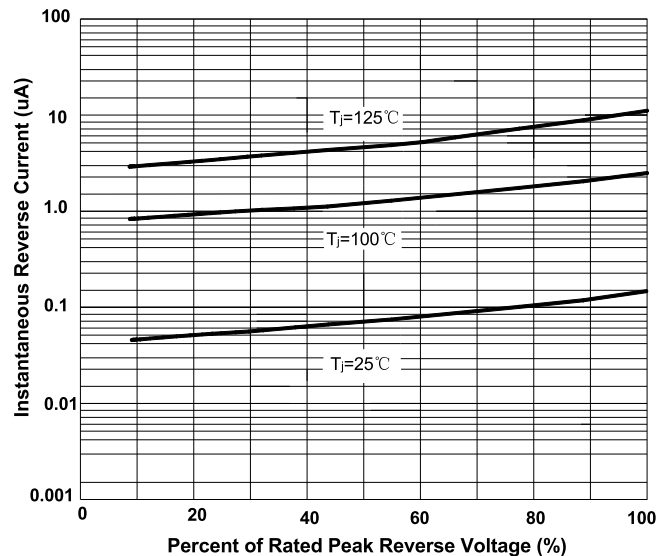
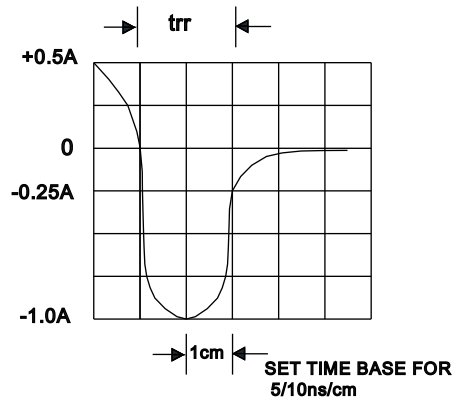
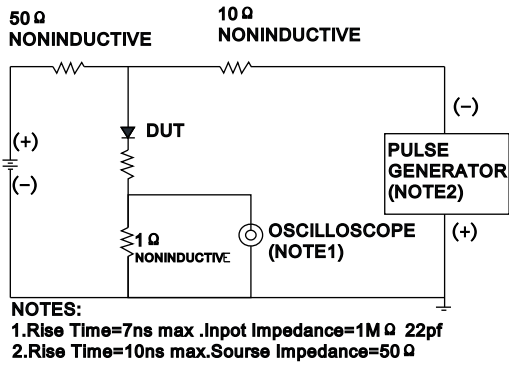
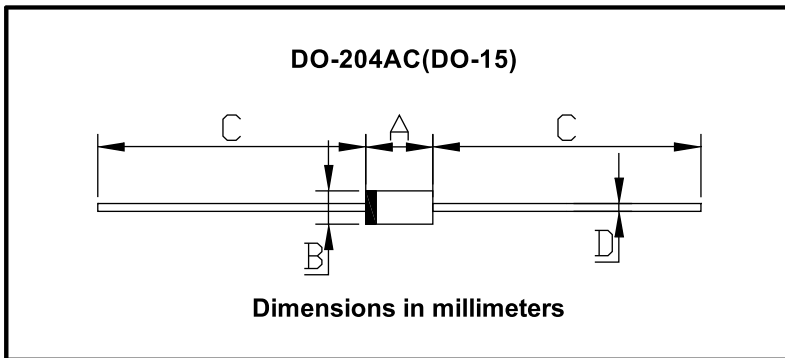


FIG.5: Diagram of circuit and Testing wave form of reverse recovery time



■ **OUTLINE DIMENSIONS**



DO-204AC(DO-15)		
Dim	Min	Max
A	5.80	7.60
B	2.60	3.60
C	25.4	/
D	0.70	0.90