

■ 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:** R-6
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	HER601 G	HER602 G	HER603 G	HER604 G	HER605 G	HER606 G	HER607 G	HER608 G
Device marking code			HER601 G	HER602 G	HER603 G	HER604 G	HER605 G	HER606 G	HER607 G	HER608 G
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	V	50	100	200	300	400	600	800	1000
Maximum RMS Voltage	V _{RMS}	V	35	70	140	210	280	420	560	700
Maximum DC blocking Voltage	V _{DC}	V	50	100	200	300	400	600	800	1000
Average Forward Current @60Hz sine wave, Resistance load, T _a =65°C	I _{F(AV)}	A	6.0							
Forward Surge Current (Non-repetitive) @60Hz Half-sine wave, 1 cycle, T _j =25°C	I _{FSM}	A	200							
Forward Surge Current (Non-repetitive) @1ms, square wave, 1 cycle, T _j =25°C			400							
Current squared time @1ms≤t≤8.3ms T _j =25°C, Rating of per diode	I ² t	A ² s	166							
Typical junction capacitance @Measured at 1MHz and Applied Reverse Voltage of 4.0 V.D.C	C _j	pF	150			83		81		
Storage Temperature	T _{stg}	°C	-55 ~ +150							
Junction Temperature	T _j	°C	-55 ~ +150							

■ ELECTRICAL CHARACTERISTICS (T_a=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	HER601 G	HER602 G	HER603 G	HER604 G	HER605 G	HER606 G	HER607 G	HER608 G
Maximum instantaneous forward voltage drop per diode	V _F	V	I _F M=6.0A	1.0			1.3		1.7		
Maximum DC reverse current at rated DC blocking voltage per diode	I _R	μA	T _j =25°C	2.5							
			T _j =125°C	150							
Maximum reverse recovery time	t _r	ns	I _F =0.5A, I _R =1.0A, I _r =0.25A	50					75		

■ THERMAL CHARACTERISTICS (T_a=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	HER601G	HER602G	HER603G	HER604G	HER605G	HER606G	HER607G	HER608G
Typical Thermal Resistance	R _{θJA}	°C/W	15							

■ PACKAGING INFORMATION

PREFERRED P/N	PACKAGE CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
HER601G~HER608G	D1	Approximate 1.95	500	500	5000	Tape
HER601G~HER608G	C1	Approximate 1.95	100	100	5000	Bulk

■ CHARACTERISTICS (TYPICAL)

FIG.1: I_o-T_a Curve

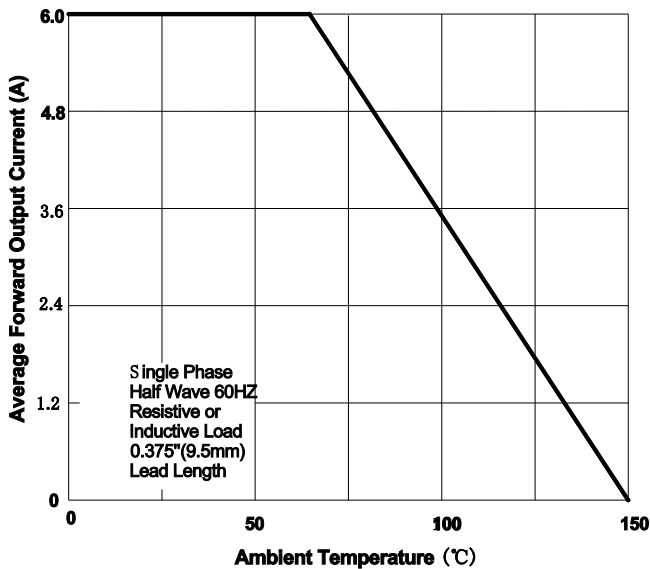


FIG.2: Forward Surge Current Capability

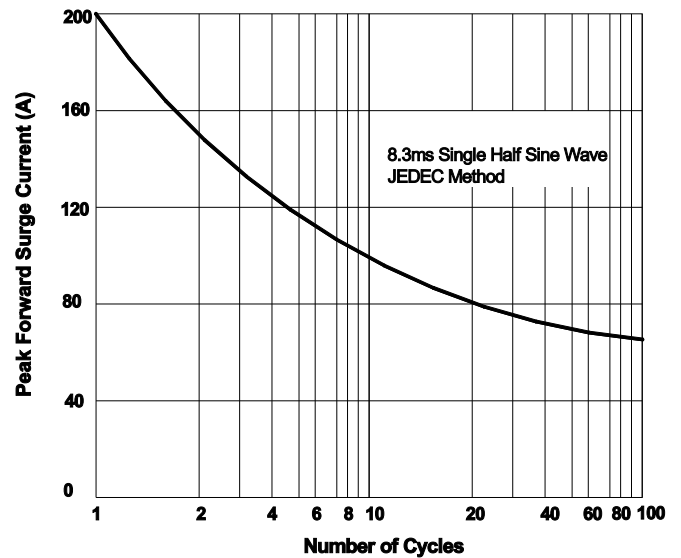


FIG.3: Forward Voltage

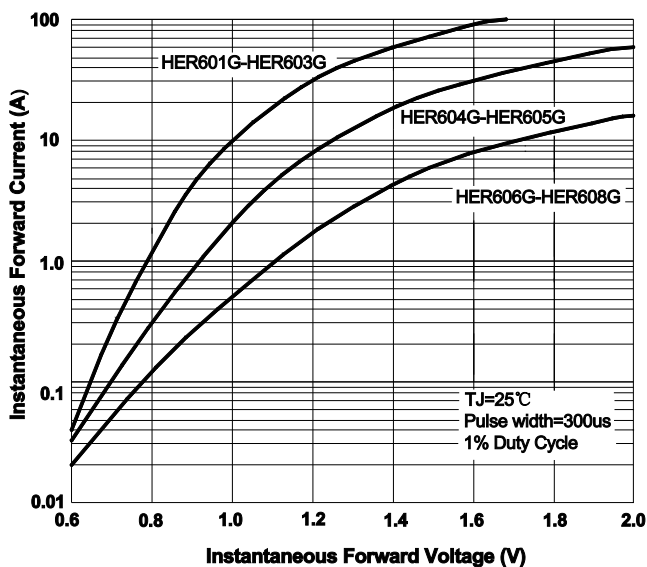


FIG.4: Typical Reverse Characteristics

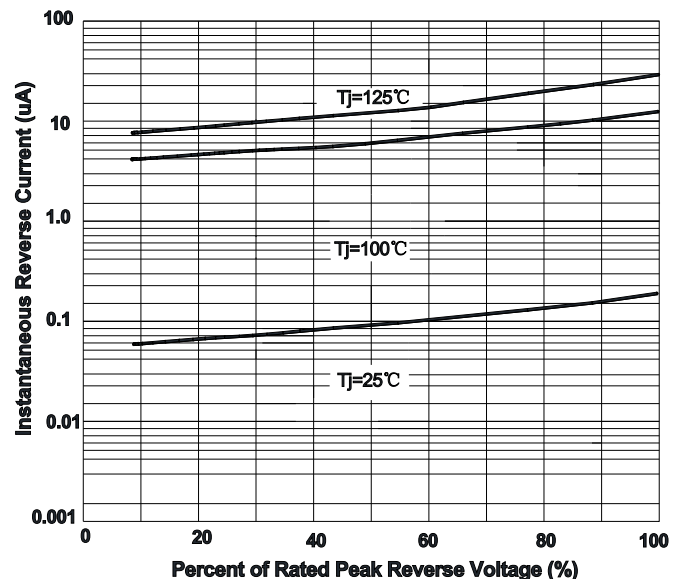
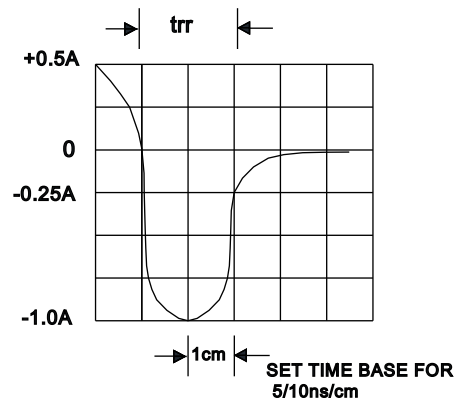
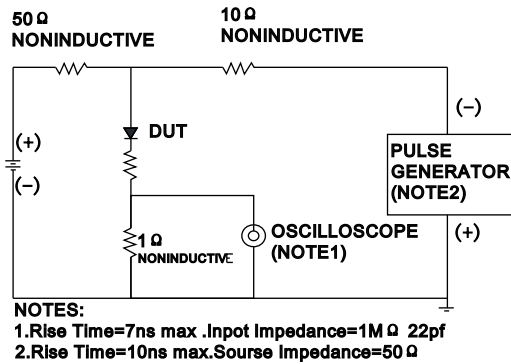
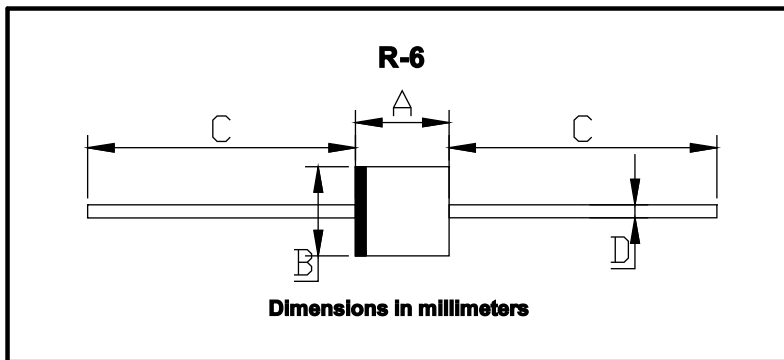


FIG.5: Diagram of circuit and Testing wave form of reverse recovery time



■ **OUTLINE DIMENSIONS**



R-6		
Dim	Min	Max
A	8.60	9.10
B	8.60	9.10
C	25.4	/
D	1.20	1.32