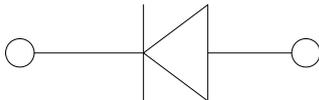


## High Efficient Rectifier



### 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:** R-1  
Molding compound meets UL 94 V-0 flammability rating, RoHS-compliant, Halogen free
- **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	1H1G	1H2G	1H3G	1H4G	1H5G	1H6G	1H7G	1H8G
Device marking code			1H1G	1H2G	1H3G	1H4G	1H5G	1H6G	1H7G	1H8G
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> =65°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	1H1G	1H2G	1H3G	1H4G	1H5G	1H6G	1H7G	1H8G
Maximum instantaneous forward voltage drop per diode	V <sub>F</sub>	V	I <sub>F</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>r</sub>	ns	I <sub>F</sub> =0.5A, I <sub>R</sub> =1.0A, I <sub>r</sub> =0.25A	50					75		



# 1H1G THRU 1H8G

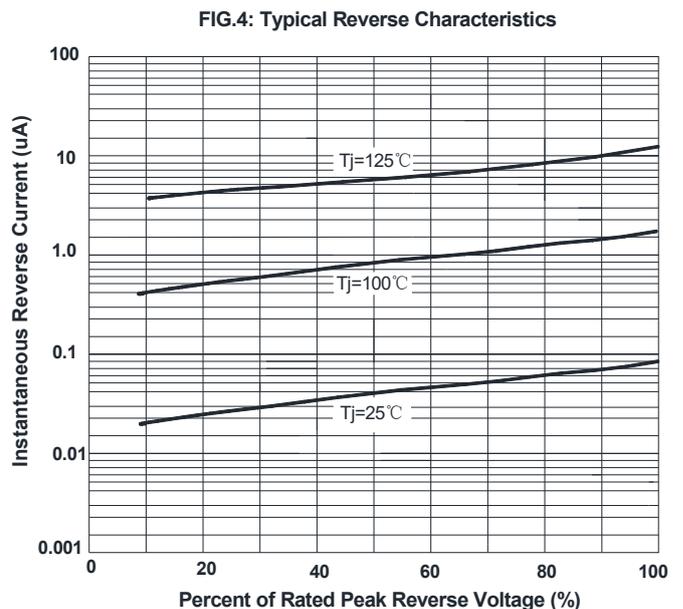
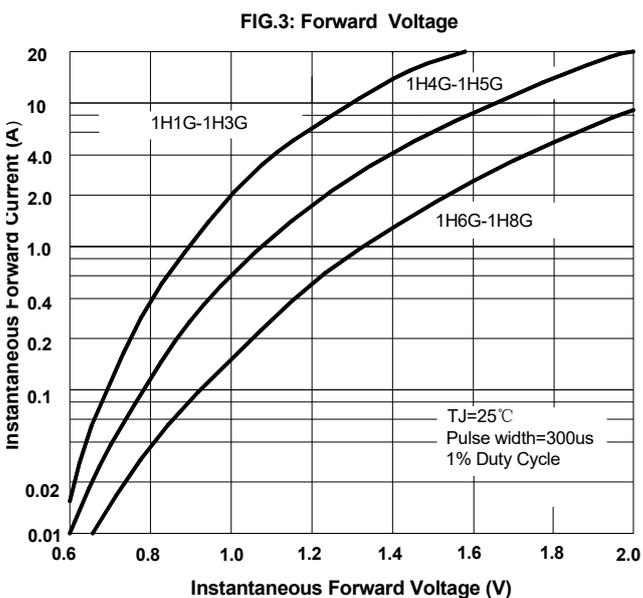
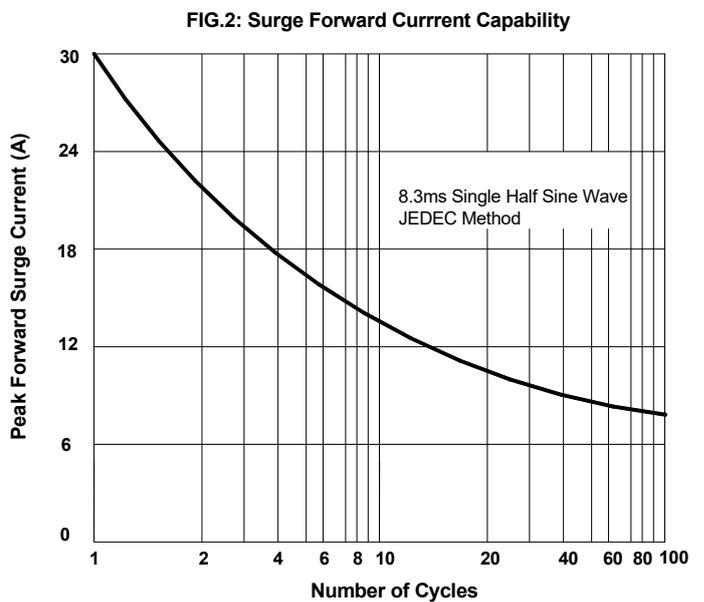
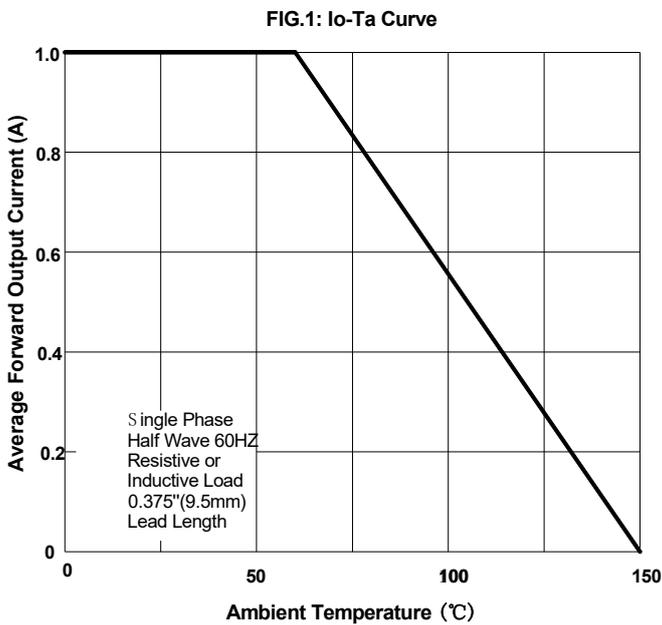
## ■ Thermal Characteristics (T<sub>a</sub>=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	1H1G	1H2G	1H3G	1H4G	1H5G	1H6G	1H7G	1H8G
Typical Thermal Resistance	R <sub>θJ-A</sub>	°C/W	95							

## ■ Ordering Information (Example)

PREFERRED P/N	PACKAGE CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
1H1G~1H8G	D1	Approximate 0.19	5000	5000	50000	Tape
1H1G~1H8G	C1	Approximate 0.19	1000	1000	50000	Bulk

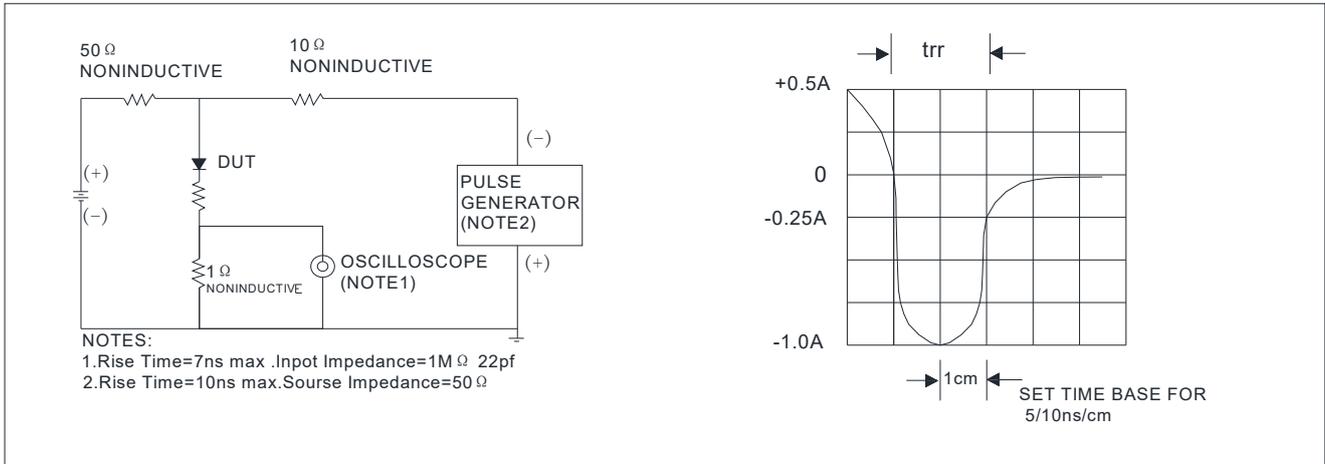
## ■ Characteristics (Typical)



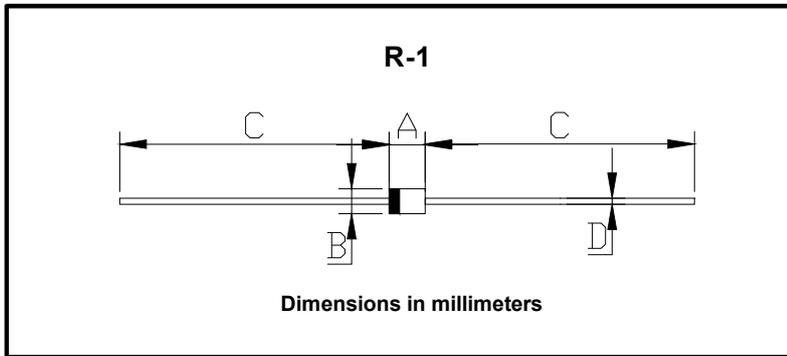


# 1H1G THRU 1H8G

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



## ■ Outline Dimensions



R-1		
Dim	Min	Max
A	3.00	3.30
B	2.00	2.70
C	25.4	/
D	0.53	0.64



## 1H1G THRU 1H8G

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