

### Features

- Low profile package
- Ideal for automated placement
- Glass passivated chip junction
- High frequency
- High forward surge capability
- Meets MSL level 1, per J-STD-020,LF maximum peak of 260 °C
- AEC-Q101 qualified available
- Automotive product No.: base P/N-H



### Typical Application

For use in high frequency rectification of power supply, inverters, converters, and freewheeling diodes for consumer and telecommunication.



### Mechanical Data

- Package: DO-214AC(SMA)  
Molding compound meets UL 94 V-0 flammability rating,RoHS-compliant
- Terminals: Tin plated leads, solderable per J-STD-002 and JESD22-B102
- Polarity: Cathode line denotes the cathode end

### Maximum Ratings (Ta=25°C Unless otherwise specified)

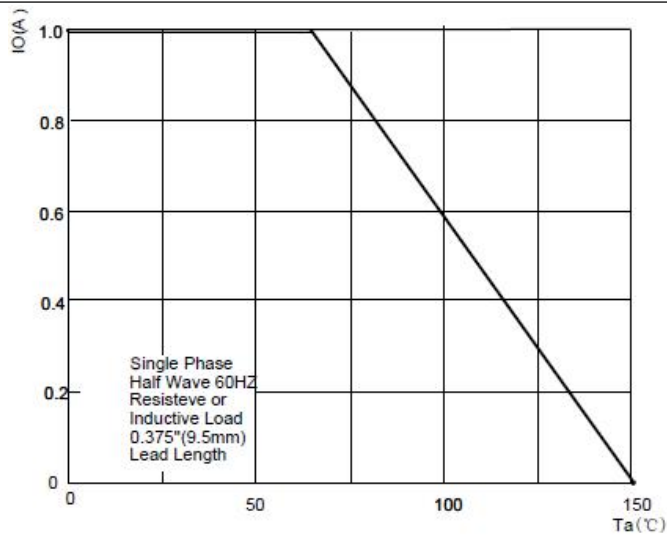
PARAMETER	Symbol	Unit	Conditions	H1HV2
Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	V		1200
Average Forward Current	I <sub>F(AV)</sub>	A	60Hz Half-sine wave, Resistance load, Ta(FIG 1)	1.0
Surge(Nonrepetitive)Forward Current	I <sub>FSM</sub>	A	60HZ Half-sine wave, 1 cycle, Ta=25°C	25
Storage Temperature	T <sub>stg</sub>	°C		-55 ~ +150
Junction Temperature	T <sub>j</sub>	°C		-55 ~ +150

### Electrical Characteristics (Ta=25°C Unless otherwise specified)

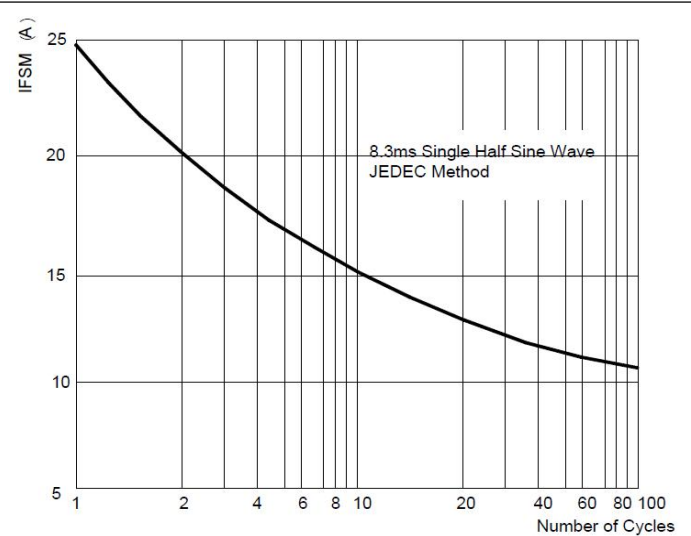
PARAMETER	Symbol	Unit	Conditions	H1HV12	
Peak Forward Voltage	V <sub>FM</sub>	V	I <sub>FM</sub> = 1.0A	T <sub>j</sub> = 25°C	1.70
				T <sub>j</sub> = 125°C	1.35
Peak Reverse Current	I <sub>RRM1</sub>	μA	V <sub>RM</sub> = V <sub>RRM</sub>	Ta = 25°C	5.0
	I <sub>RRM2</sub>			Ta = 125°C	100
reverse recovery time	T <sub>rr</sub>	ns	I <sub>F</sub> = 0.5A, I <sub>R</sub> = 1.0A, I <sub>rr</sub> = 0.25A	75	
Thermal Resistance(Typical)	R <sub>θJ-A</sub>	°C/W	Between junction and ambient	110	
Typical junction capacitance	C <sub>j</sub>	pF	Measured at 1MHZ and Applied Reverse Voltage of 4.0 V.D.C	15	

## Characteristics (Typical)

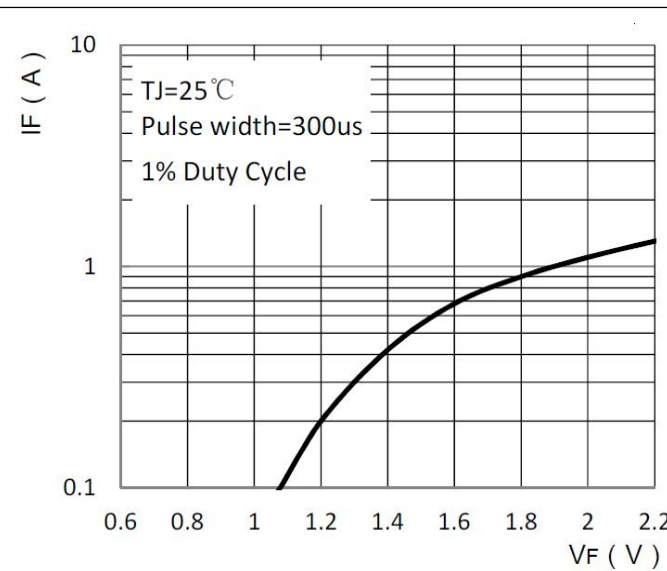
**FIG1: Forward Current Derating Curve**



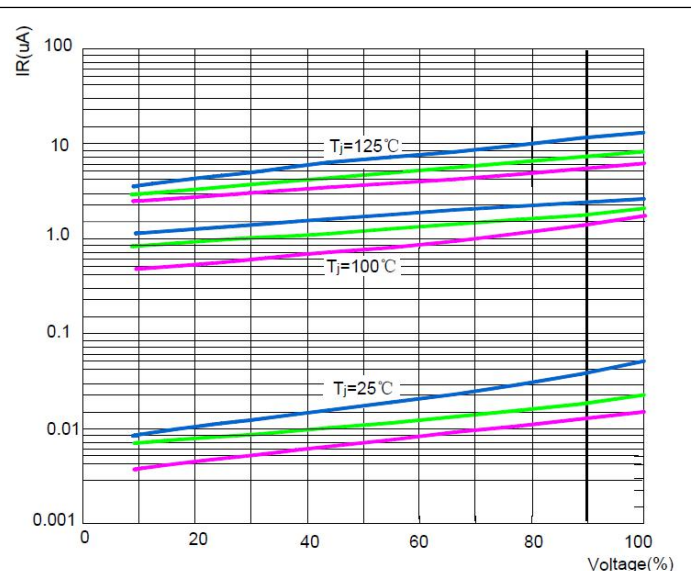
**FIG2: Surge Forward Current Capability**



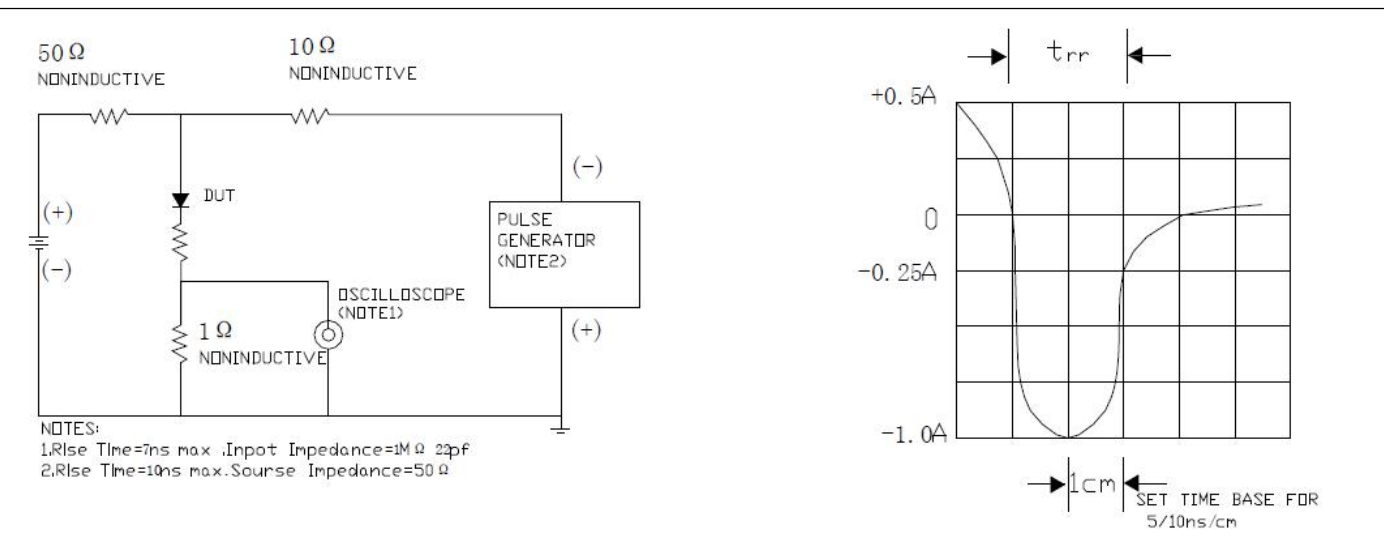
**FIG3: Instantaneous Forward Voltage**



**FIG4: Typical Reverse Characteristics**



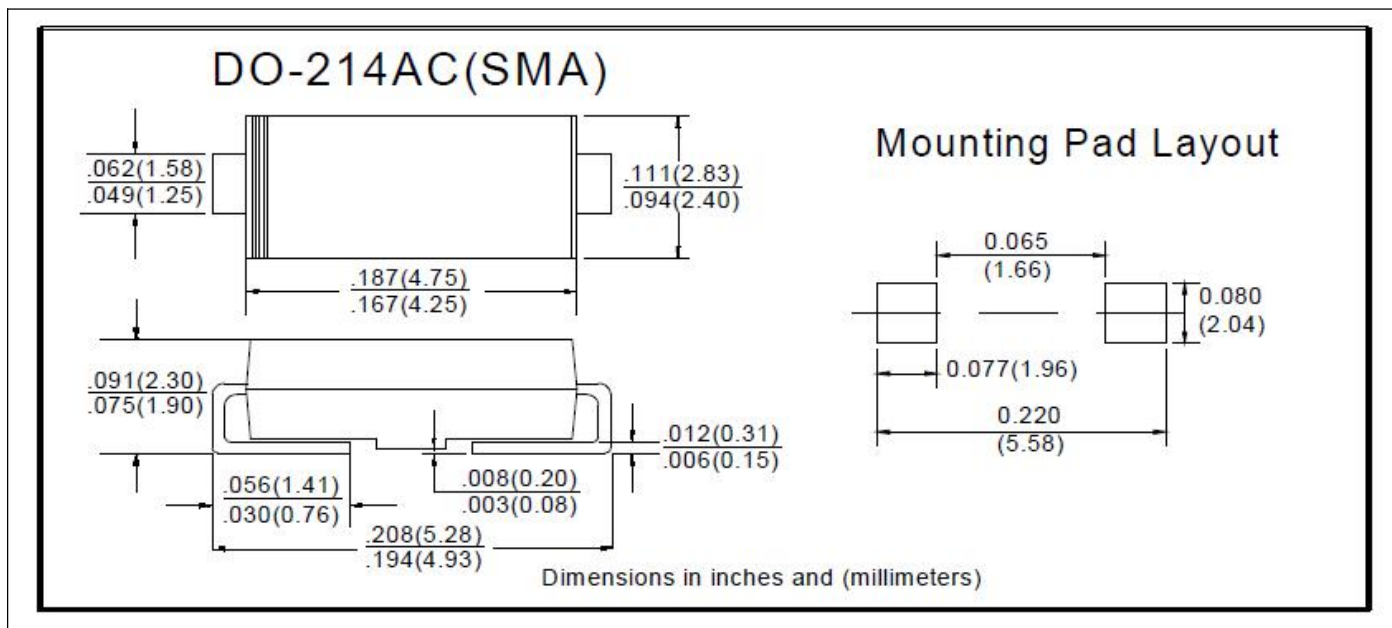
**FIG5: Diagram of circuit and Testing wave form of reverse recovery time**



## Ordering Information (Example)

PREFERED	PACKAGE CODE	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
H1HV12	DO-214AC(SMA)	5000	10000	80000	13" reel
H1HV12	DO-214AC(SMA)	7500	15000	120000	13" reel

## Outline Dimensions



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