

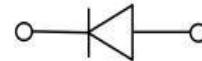
### Features

- Low profile package
- Ideal for automated placement
- Glass passivated chip junction
- Super fast reverse recovery time
- High forward surge capability
- Meets MSL level 1, per J-STD-020,LF maximum peak of 260 °C



### Typical Application

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



### Mechanical Data

- Package: DO-214AA(SMB)  
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	MURXXXSB					
				305	310	315	320	340	360
Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	V		50	100	150	200	400	600
Average Forward Current	I <sub>o</sub>	A	60HZ Half-sine wave, Resistance load, T <sub>c</sub> (Fig.1)	3					
Surge(Nonrepetitive)Forward Current	I <sub>FSM</sub>	A	60Hz sine wave, 1 cycle, Ta=25°C	75					
Storage Temperature	T <sub>stg</sub>	°C		-55 ~ +175					
Junction Temperature	T <sub>j</sub>	°C		-55 ~ +175					

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

PARAMETER	Symbol	Unit	Conditions	MURXXXSB					
				305	310	315	320	340	360
Peak Forward Voltage	V <sub>FM</sub>	V	@Ta=25°C	0.95				1.30	
			@Ta=150°C	0.82				1.05	
Peak Reverse Current	I <sub>RRM1</sub>	μA	V <sub>RM</sub> =V <sub>RRM</sub>	Ta=25°C				5	
	I <sub>RRM2</sub>			Ta=125°C				150	
Maximum 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	25				50	
Thermal Resistance	R <sub>θJ-L</sub>	°C/W	Between junction and Line	11					



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Characteristics (Typical)

# MUR305SB THRU MUR360SB

## Ultra-Fast Recovery Rectifier Diodes FRED

FIG1: Forward Current Derating Curve

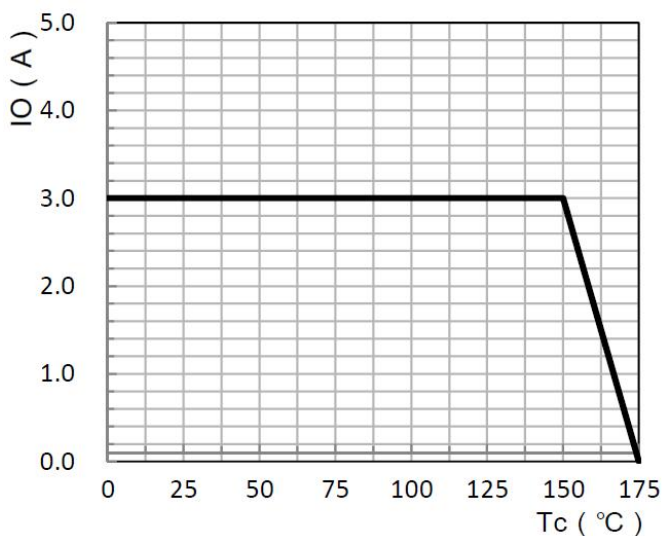


FIG2: Maximum Non-Repetitive Forward Surge Current

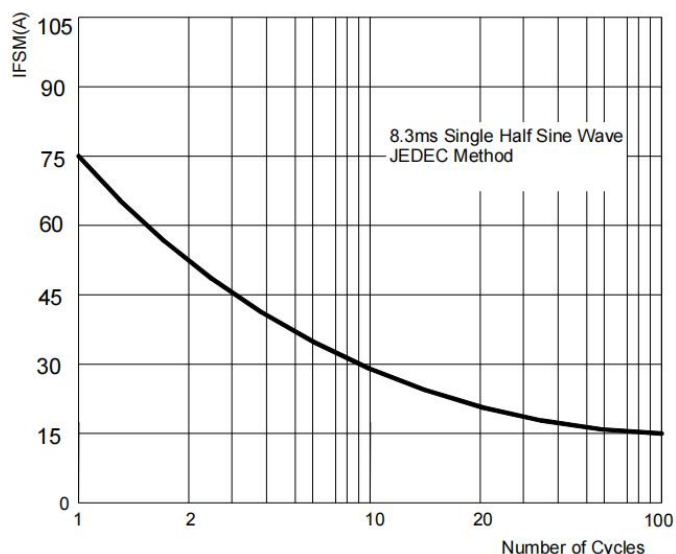


FIG3: Instantaneous Forward Voltage

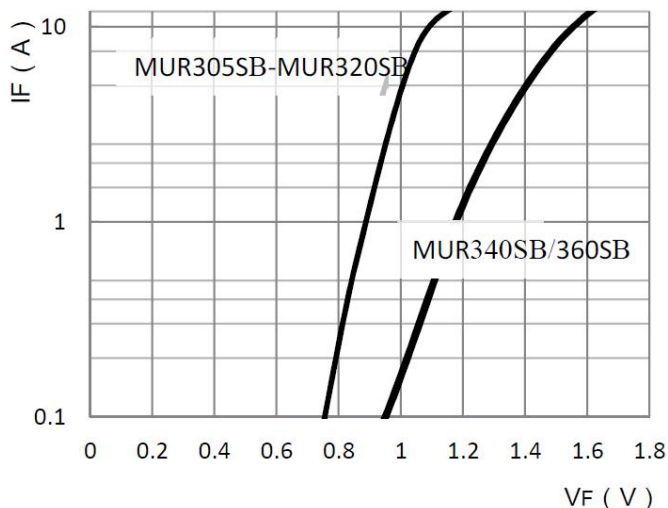


FIG4: Typical Reverse Characteristics

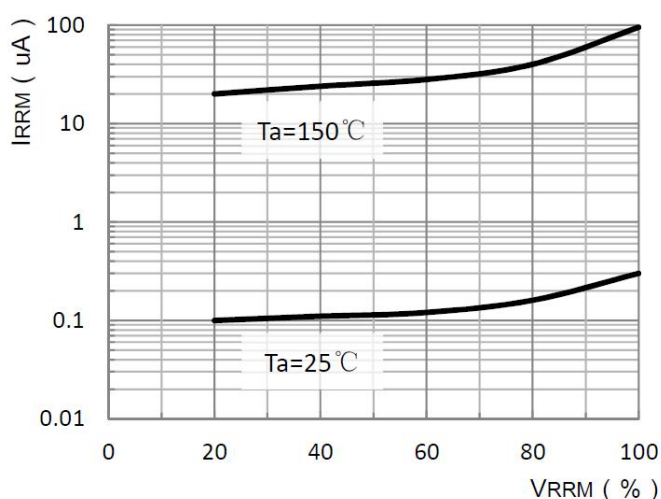
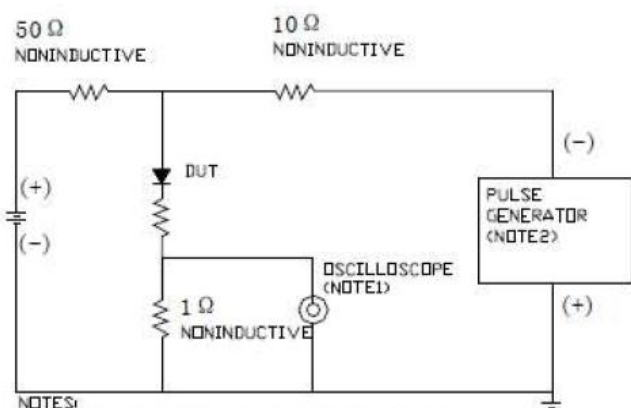
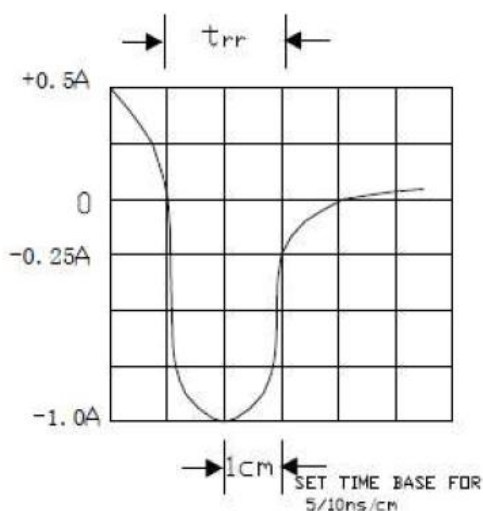


FIG5: Diagram of circuit and Testing wave form of reverse recovery time



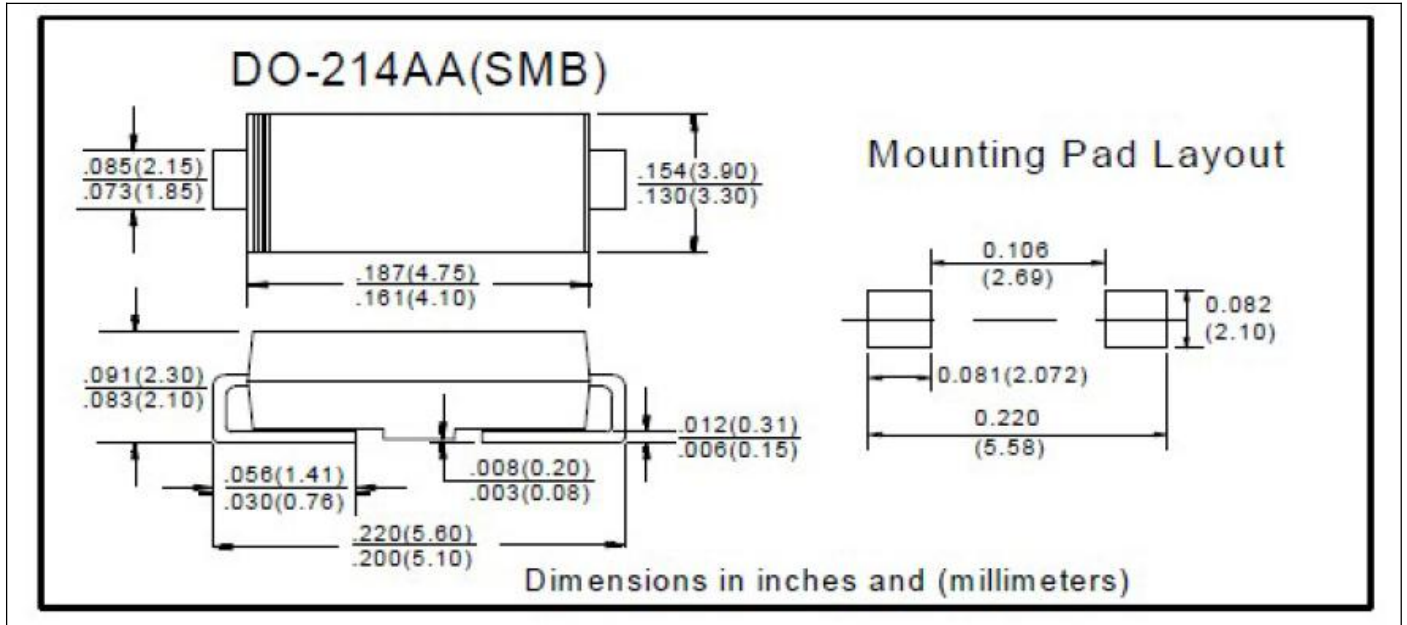
NOTES:  
 1. Rise Time = 7ns max. Input Impedance = 1M Ω 22pF  
 2. Rise Time = 10ns max. Source Impedance = 50 Ω



■ Ordering Information (Example)

PREFERED	PACKAGE CODE	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
MUR305SB~MUR360SB	DO-214AC(SMB)	3000	6000	48000	13" reel

■ Outline Dimensions



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