

Features

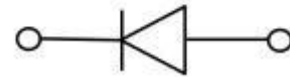
- Low profile package
- Ideal for automated placement
- Glass passivated chip junction
- Super fast reverse recovery time
- High forward surge capability
- Meets MSL level 1, per J-STD-020,LF maximum peak of 260 °C

Typical Application

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

Mechanical Data

- Package: DO-214AB(SMC)
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	MUR540S	MUR560S
Repetitive Peak Reverse Voltage	V _{RRM}	V		400	600
Average Forward Current	I _O	A	Half-sine wave, Resistance load, Tc(Fig.1)	5.0	
Surge(Nonrepetitive)Forward Current	I _{FSM}	A	60HZ sine wave, 1 cycle, Ta=25°C	150	
Storage Temperature	T _{stg}	°C		-55 ~ +150	
Junction Temperature	T _j	°C		-55 ~ +150	

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

PARAMETER	Symbol	Unit	Conditions	MUR440S	MUR560S
Peak Forward Voltage	V _{FM}	V	@I _F =5A	1.30	
Peak Reverse Current	I _{RRM1}	μA	V _{RM} =V _{RRM}	Ta=25°C	10
	I _{RRM2}			Ta=125°C	250
Maximum reverse recovery time	T _{rr}	ns	I _F =0.5A, I _R =1.0A, I _{rr} =0.25A	50	
Thermal Resistance	R _{θJ-L}	°C/W	Between junction and terminal	12	

FIG1: Forward Current Derating Curve

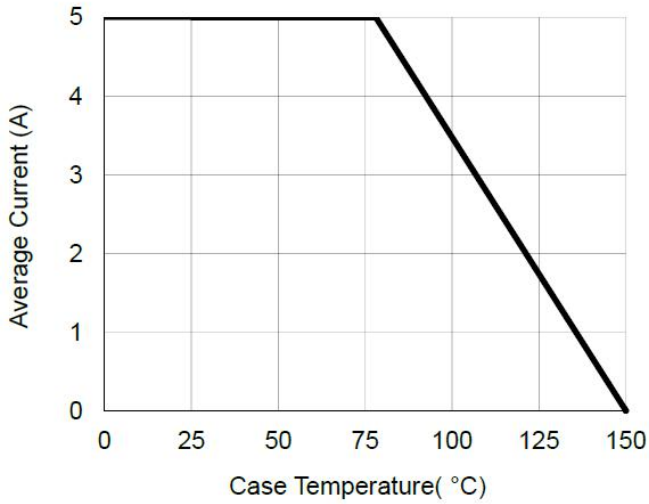


FIG2: Surge Forward Current Capability

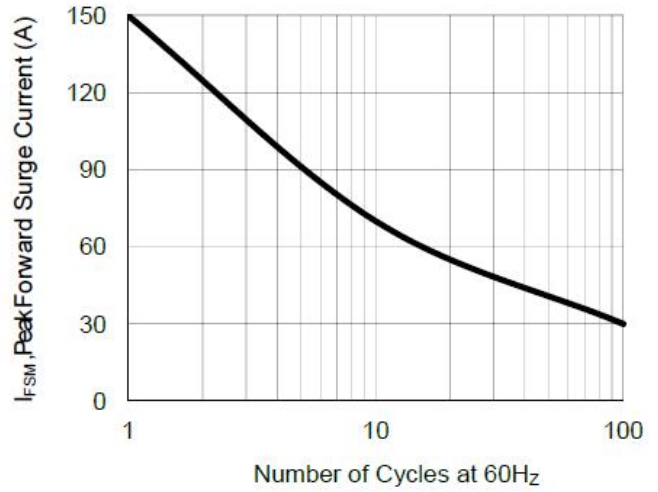


FIG3: Instantaneous Forward Voltage

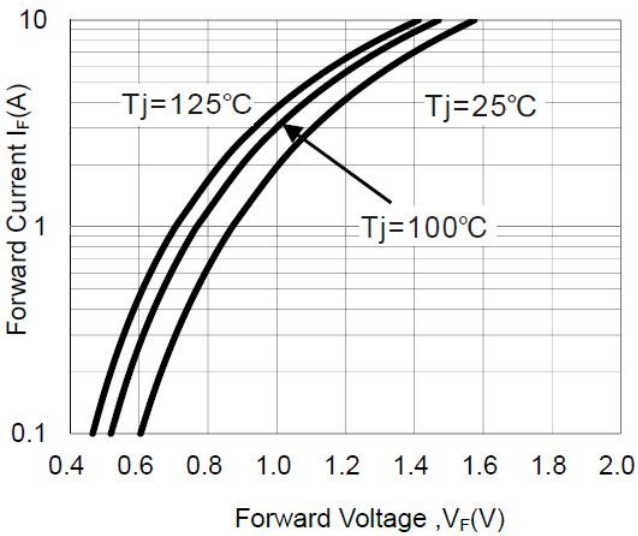


FIG4: Typical Reverse Characteristics

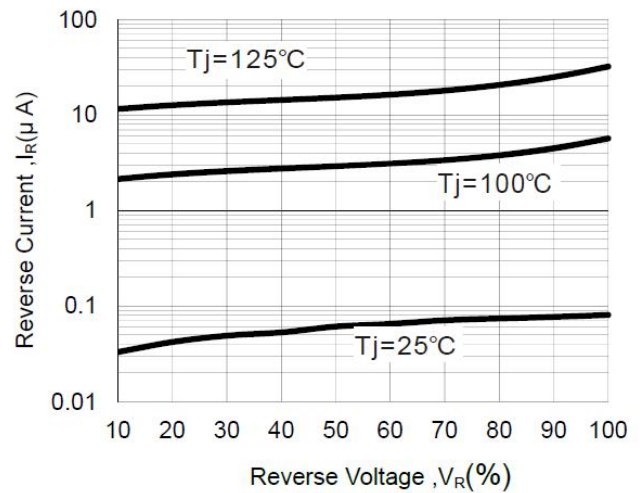
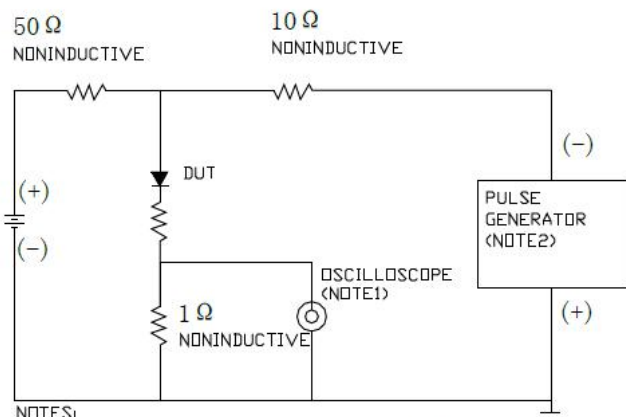
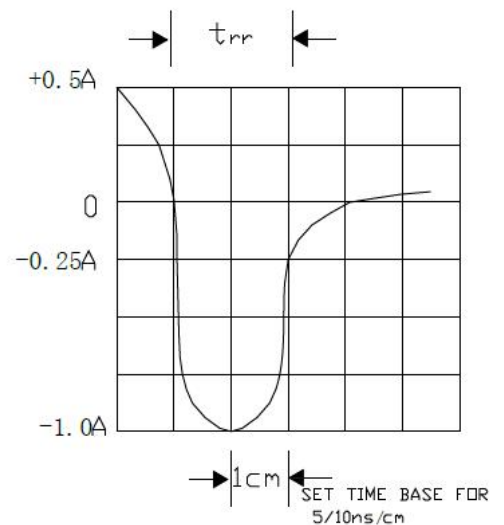


Diagram of circuit and Testing wave form of recovery time



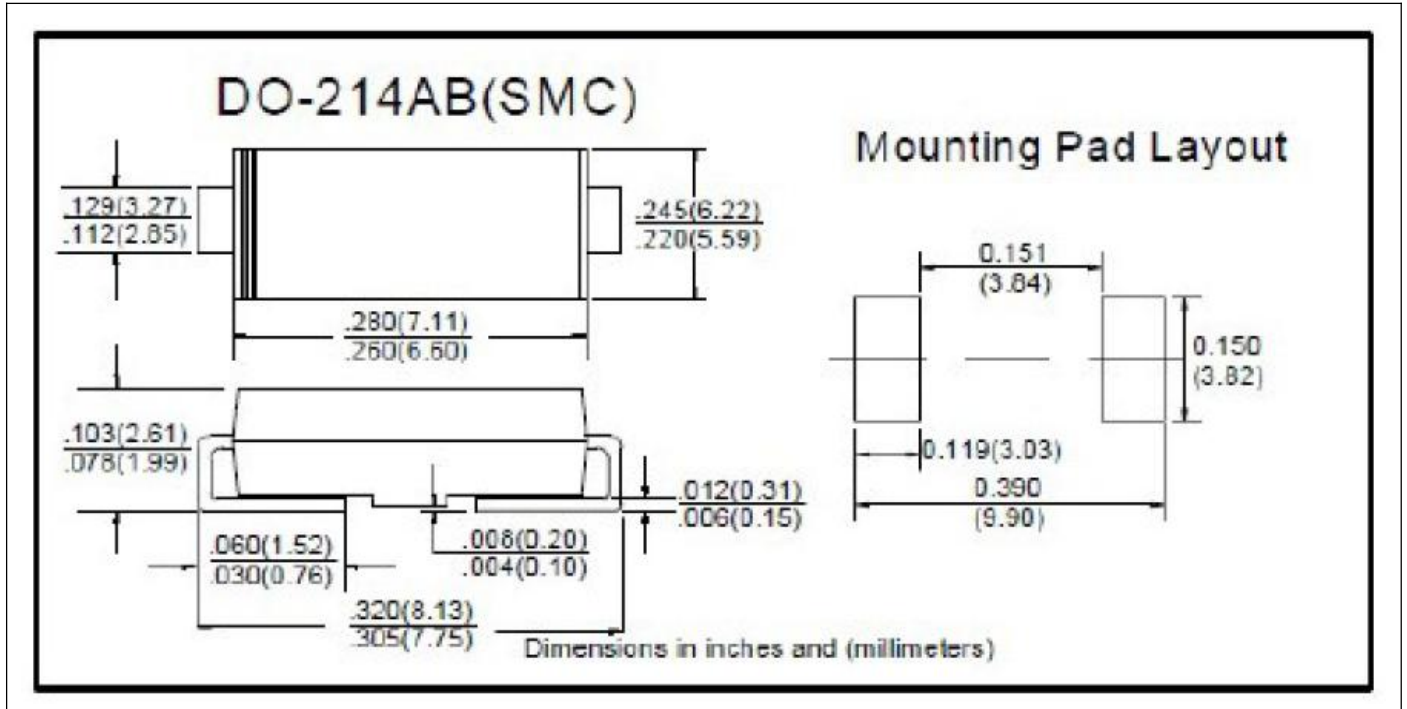
NOTES:
1. Rise Time=7ns max. Input Impedance=1MΩ 22pf
2. Rise Time=10ns max. Source Impedance=50Ω



Ordering Information (Example)

PREFERED	PACKAGE CODE	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
MUR540S~MUR560S	DO-214AB(SMC)	3000	6000	42000	13" reel

Outline Dimensions



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