

Features

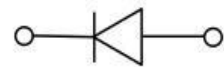
- Low power loss
- Ultra-fast recovery time for high efficiency
- Glass passivated chip junction
- Low leakage current
- High forward surge capability
- Meets MSL level 1, per J-STD-020,LF maximum peak of 260 °C

Typical Application

For use in high frequency rectification and freewheeling application in switching mode converters and inverters for consumer ,computer and telecommunication.

Mechanical Data

- Package: 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: Color band denotes cathode end



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

PARAMETER	Symbol	Unit	Conditions	MUR120SB
Repetitive Peak Reverse Voltage	V _{RRM}	V		200
Average Forward Current	I _{F(AV)}	A	Ta=25°C	1.0
Surge(Non-repetitive)Forward Current	I _{FSM}	A	Ta=25°C 60Hz Half-sine wave,1 cycle, Ta=25°C	30
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	Condition	MUR120SB	
Peak Forward Voltage	V _{FM}	V	I _F =1.0A	0.9	
Peak Reverse Current	I _{RRM1}	μA	V _{RM} =V _{RRM}	Ta=25°C	5.0
	I _{RRM2}			Ta=125°C	300
Reverse Recovery time	T _{rr}	ns	I _F =0.5A R =1A RR =0.25A	25	
Thermal Resistance(Typical)	R _{θJ-L}	°C/W	Between junction and ambient	20	
Typical junction capacitance	C _j	pF	Measured at 1MHZ and Applied Reverse Voltage of 4.0 V.D.C	25	
Non repetitive reverse avalanche energy	ER	mJ	I(BR)R = 0.7 A, inductive load	10	

Characteristics (Typical)

FIG1: Forward Current Derating Curve

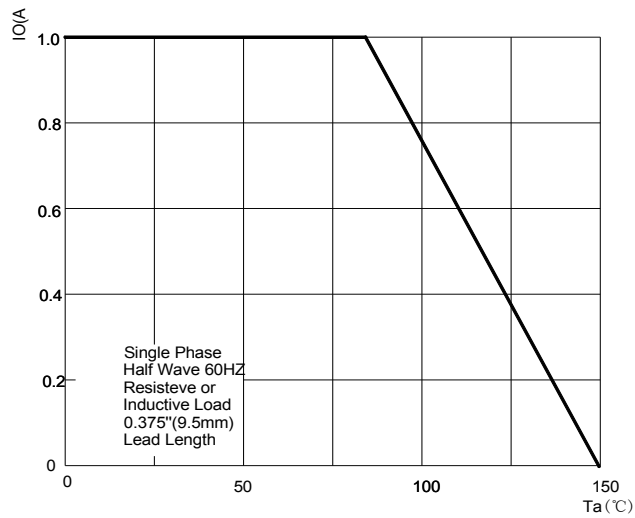


FIG2: Surge Forward Current Capability

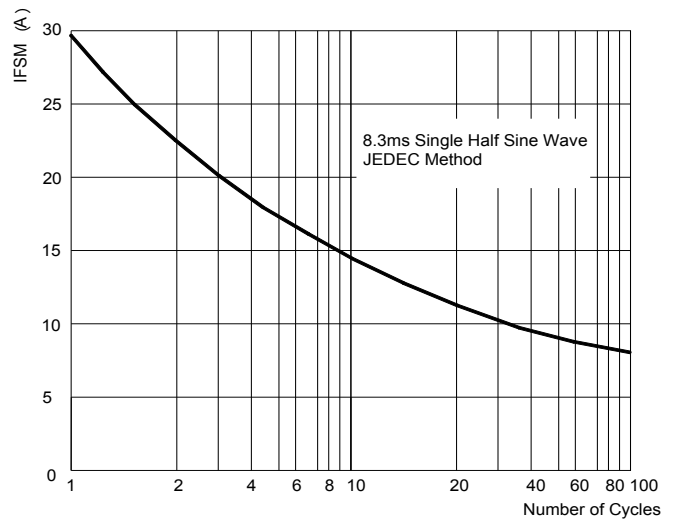


FIG3: Instantaneous Forward Voltage

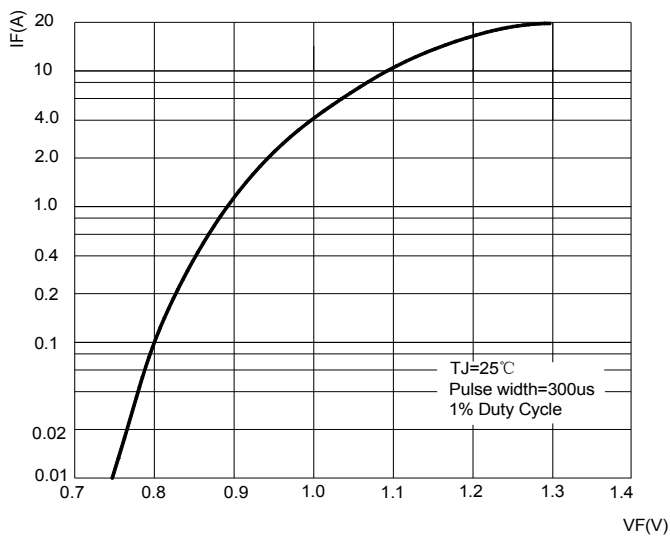


FIG4: Typical Reverse Characteristics

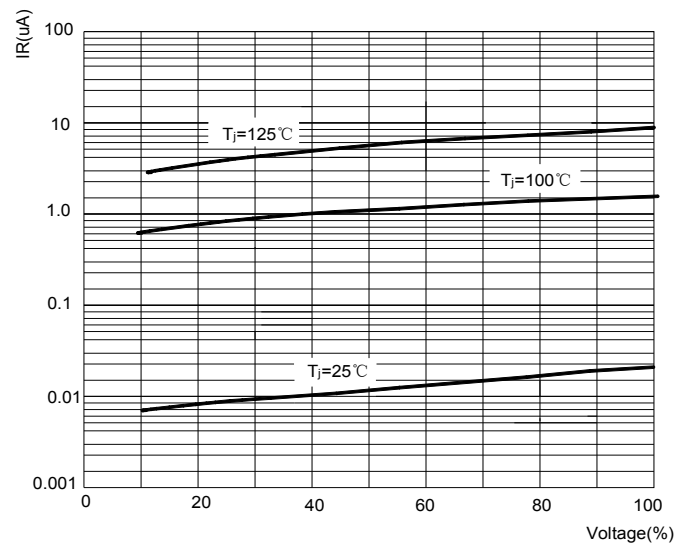
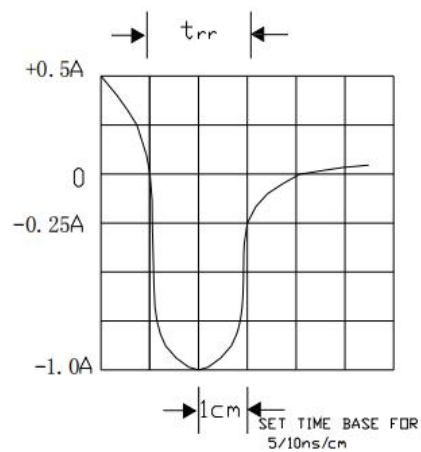
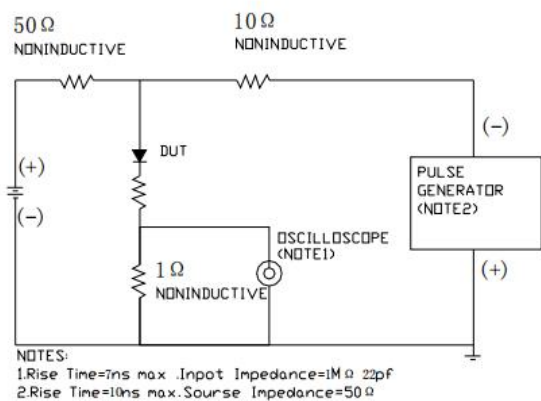


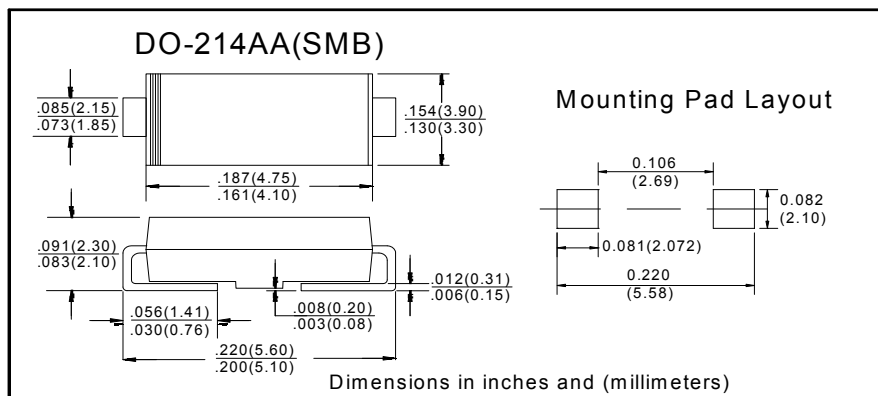
FIG5: Diagram of circuit and Testing wave form of reverse recovery time



Ordering Information (Example)

PREFERED	PACKAGE CODE	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
MUR120SB	SMB	3000	6000	48000	13" reel

Outline Dimensions



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