

Features

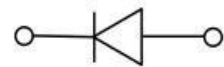
- Low power loss
- Ultra-fast recovery time for high efficiency
- Glass passivated chip junction
- Low leakage current
- High forward surge capability
- Meets MSL level 1, per J-STD-020,LF maximum peak of 260 °C

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: 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: Color band denotes cathode end



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

PARAMETER	Symbol	Unit	Conditions	MUR120SA
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	MUR120SA	
Peak Forward Voltage	V_{FM}	V	IF=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	IF =0.5A R =1A RR =0.25A	25	
Thermal Resistance(Typical)	$R_{θJ-L}$	°C/W	Between junction and ambient	24	
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

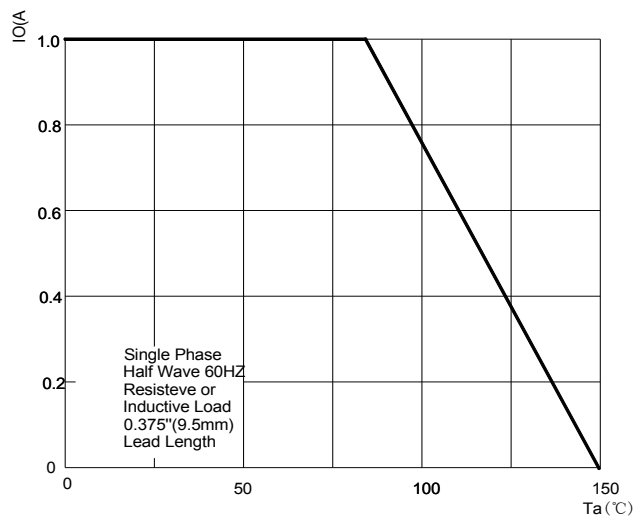


FIG2: Surge Forward Current Capability

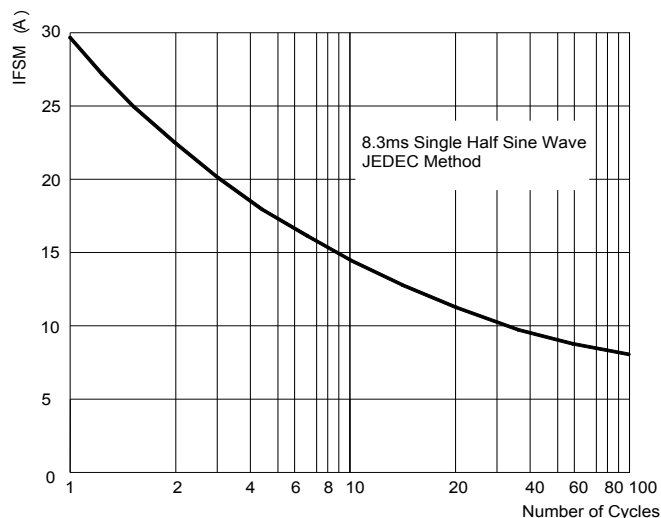


FIG3: Instantaneous Forward Voltage

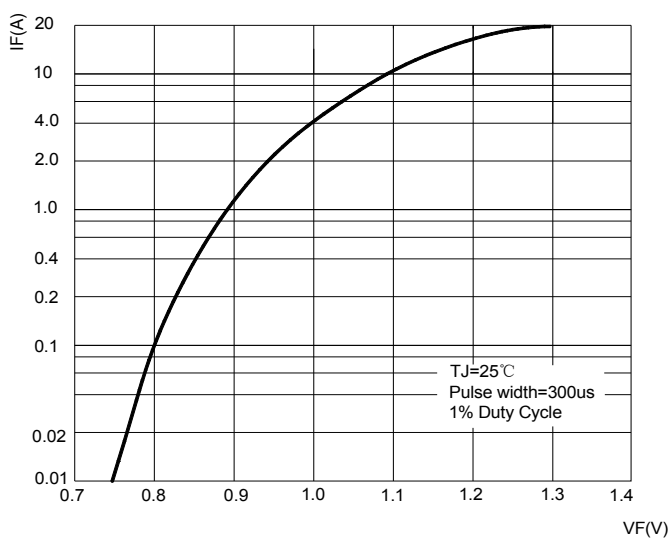


FIG4: Typical Reverse Characteristics

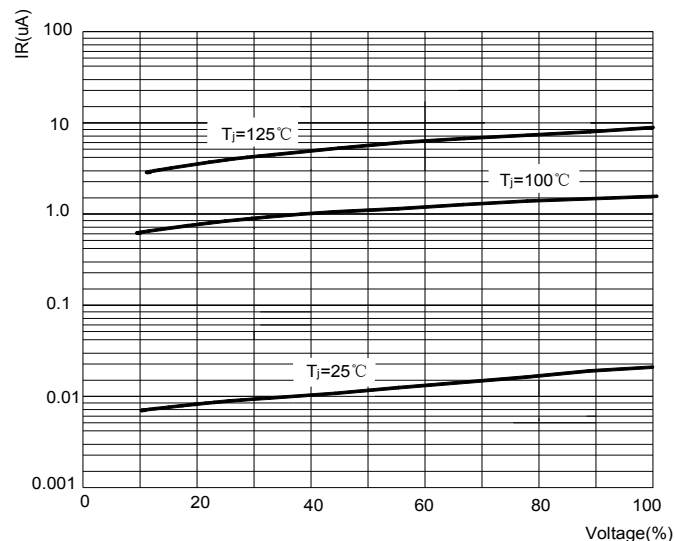
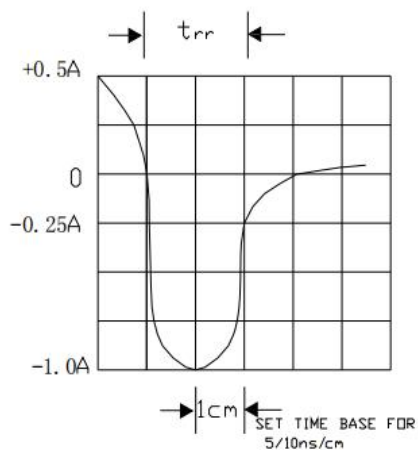
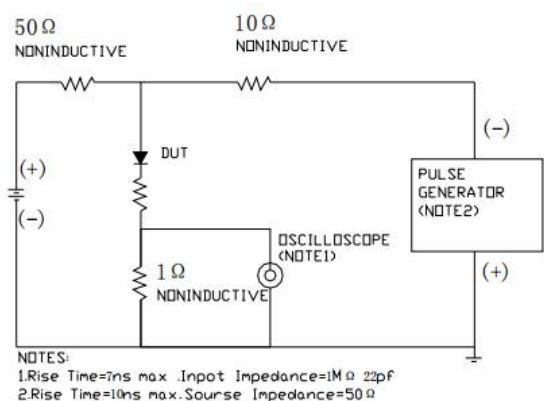


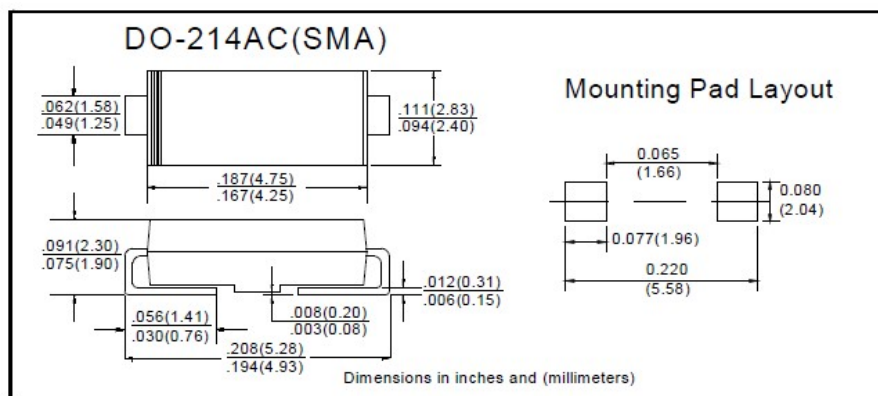
FIG5: Diagram of circuit and Testing wave form of reverse recovery time



Ordering Information (Example)

PREFERED	PACKAGE CODE	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
MUR120SA	DO-214AC(SMA)	5000	10000	80000	13" reel
MUR120SA	DO-214AC(SMA)	7500	15000	120000	13" reel

Outline Dimensions



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