

DO-27 Plastic-Encapsulate Diodes

Super Fast Recovery Rectifier Diode

Features

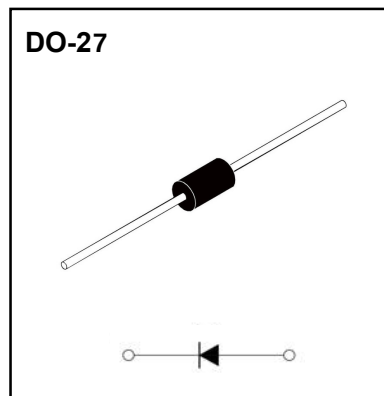
- I_O 5.0A
- V_{RRM} 50V-600V
- High surge current capability
- Glass passivated chip
- Polarity: Color band denotes cathode

Applications

- Rectifier

Marking

- SF5XG
X: From 1 to 8



Limiting Values (Absolute Maximum Rating)

Item	Symbol	Unit	Conditions	SF5							
				1G	2G	3G	4G	5G	6G	7G	8G
Repetitive Peak Reverse Voltage	V_{RRM}	V		50	100	150	200	300	400	500	600
Maximum RMS Voltage	V_{RMS}	V		35	70	105	140	210	280	350	420
Average Forward Current	$I_{F(AV)}$	A	60Hz Half-sine wave, Resistance load, $T_a=75^{\circ}\text{C}$	5.0							
Surge(Non-repetitive)Forward Current	I_{FSM}	A	60Hz Half-sine wave, 1 cycle, $T_a=25^{\circ}\text{C}$	150							
Junction Temperature	T_J	$^{\circ}\text{C}$		-55~+150							
Storage Temperature	T_{STG}	$^{\circ}\text{C}$		-55 ~ +150							

Electrical Characteristics ($T_a=25^{\circ}\text{C}$ Unless otherwise specified)

Item	Symbol	Unit	Test Condition		SF5							
					1G	2G	3G	4G	5G	6G	7G	8G
Peak Forward Voltage	V _{FM}	V	I _{FM} =5.0A		0.975				1.3		1.7	
Peak Reverse Current	I _{RRM1}	μA	V _{RM} =V _{RRM}	T _a =25℃	5							
	T _a =125℃			150								
Reverse Recovery time	t _{rr}	ns	I _F =0.5A I _R =1A I _{RR} =0.25A		35							
Thermal Resistance(Typical)	R _{θJ-A}	℃/W	Between junction and ambient		15							
Typical junction capacitance	Cj	pF	Measured at 1MHZ and Applied Reverse Voltage of 4.0 V.D.C.		100				80			

Typical Characteristics

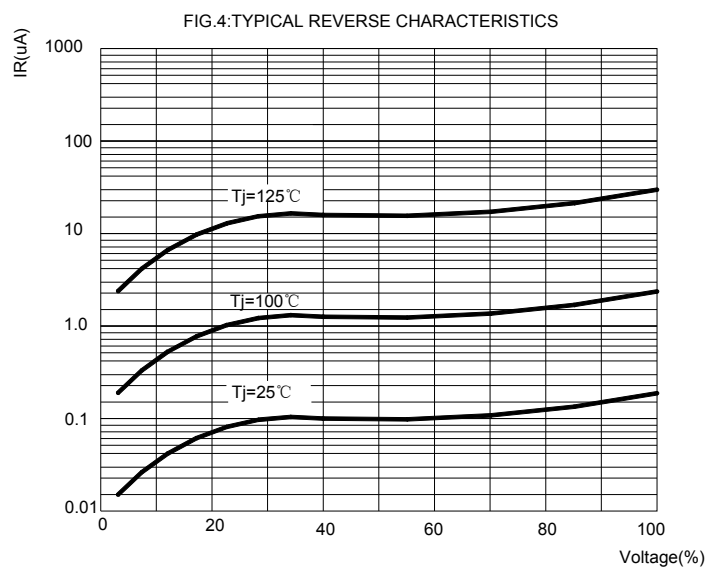
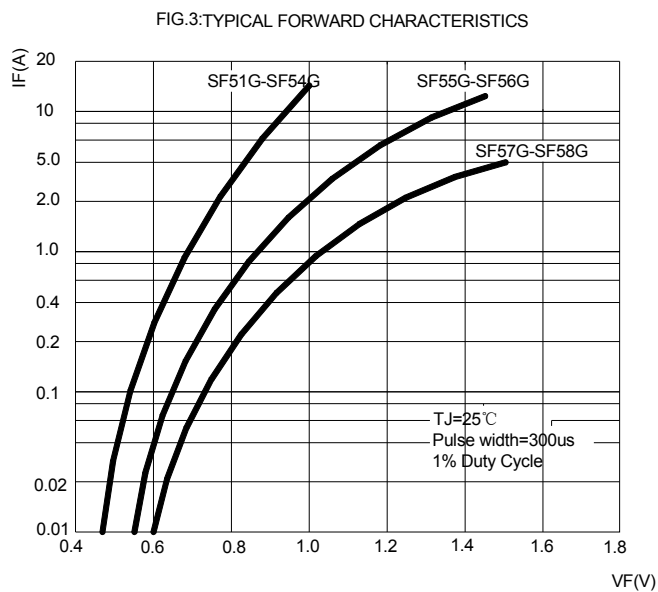
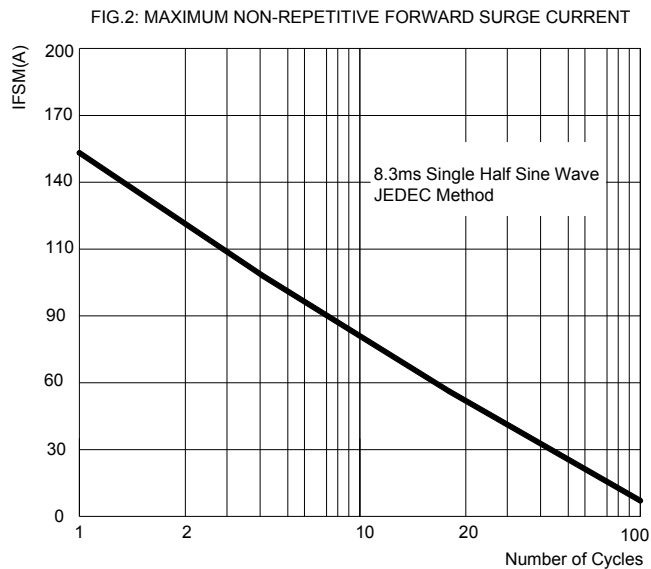
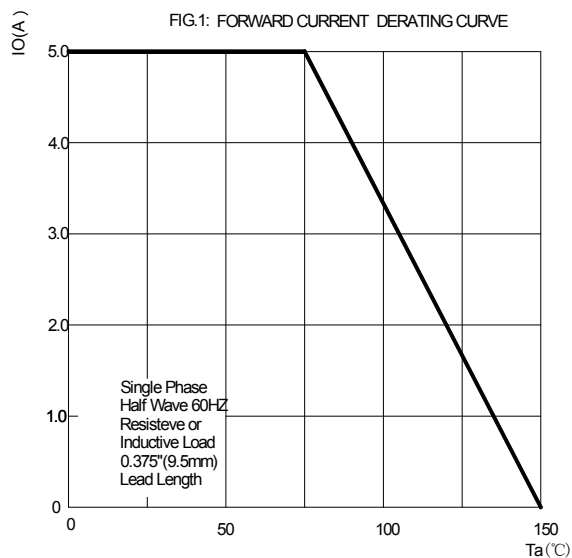
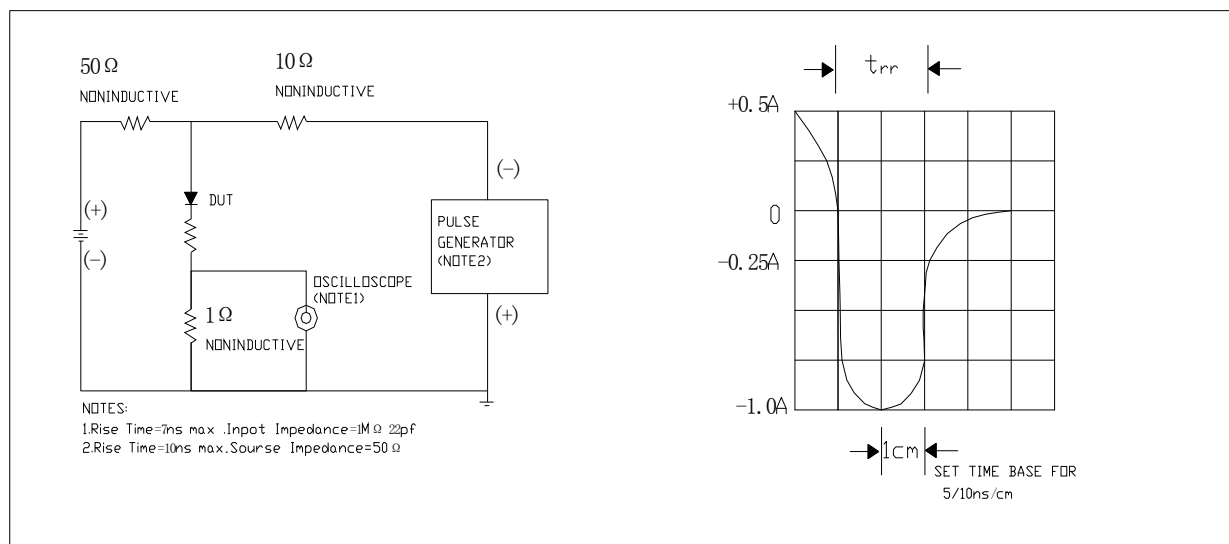
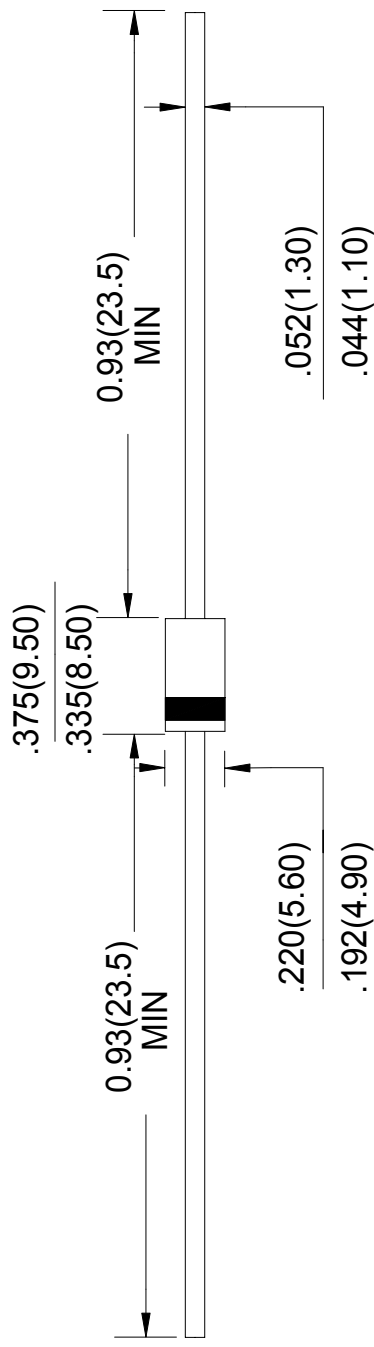


FIG.5: Diagram of circuit and Testing wave form of reverse recovery time





Unit: in inches (millimeters)

NOTICE

JSMD reserve the right to make modifications,enhancements, improvements, corrections or other changes without further notice to any product herein .JSMD does not assume any liability arising out of the application or use of any product described herein.