

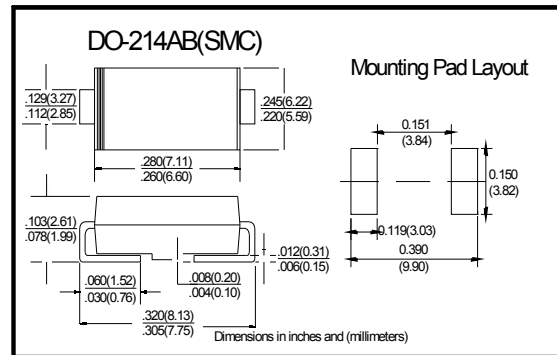
Super Fast Rectifier

Features

- I_o 5.0A
- VRRM 50V-600V
- High surge current capability

Applications

- Rectifier



Limiting Values (Absolute Maximum Rating)

Item	Symbol	Unit	Conditions	ES5							
				A	B	C	D	F	G	H	J
Repetitive Peak Reverse Voltage	V_{RRM}	V		50	100	150	200	300	400	500	600
Average Forward Current	$I_{F(AV)}$	A	60Hz Half-sine wave, Resistance load, $T_a=50^\circ\text{C}$	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	ES5							
				A	B	C	D	F	G	H	J
Peak Forward Voltage	V_{FM}	V	$I_{FM}=5.0\text{A}$	0.95			1.3		1.7		
Peak Reverse Current	I_{RRM1}	μA	$V_{RM}=V_{RRM}$	$T_a=25^\circ\text{C}$				10			
	I_{RRM2}			$T_a=125^\circ\text{C}$				500			
Reverse Recovery time	t_r	ns	$I_F=0.5\text{A}$ $I_R=1\text{A}$ $I_{RR}=0.25\text{A}$	35							
Thermal Resistance(Typical)	$R_{\theta J-A}$	$^\circ\text{C}/\text{W}$	Between junction and ambient	50							
	$R_{\theta J-L}$		Between junction and lead	15							

Notes:

- 1) Thermal resistance from junction to ambient and from junction to lead mounted on P.C.B. with 0.3" x 0.3" (8.0 mm x 8.0 mm) copper pad areas

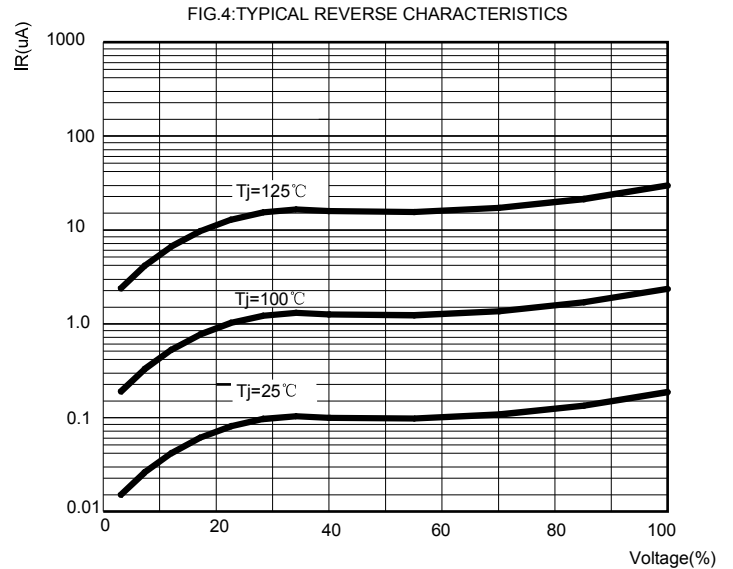
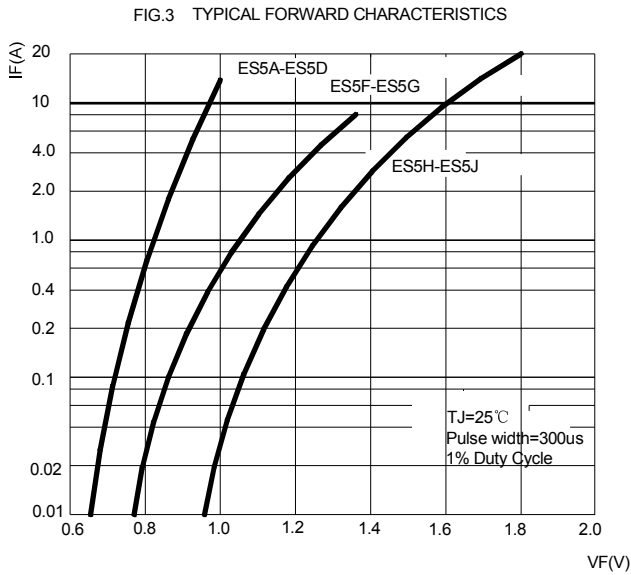
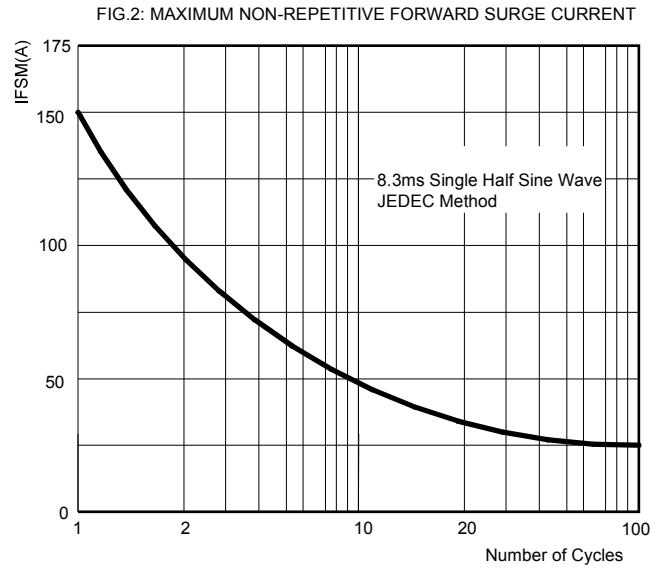
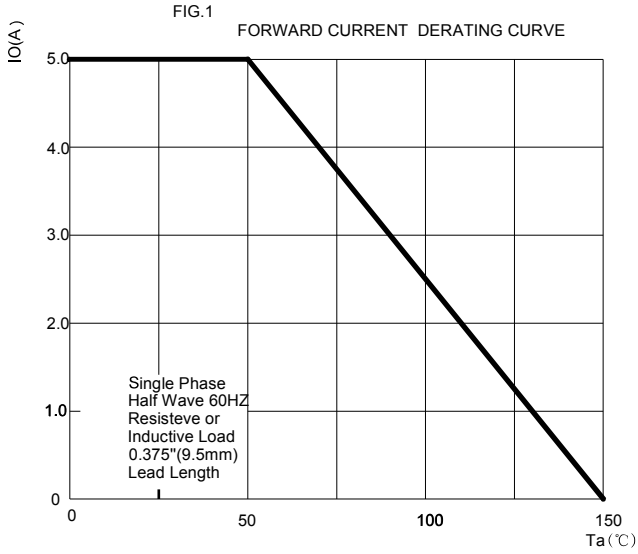


FIG.5: Diagram of circuit and Testing wave form of reverse recovery time

