Super Fast Rectifier

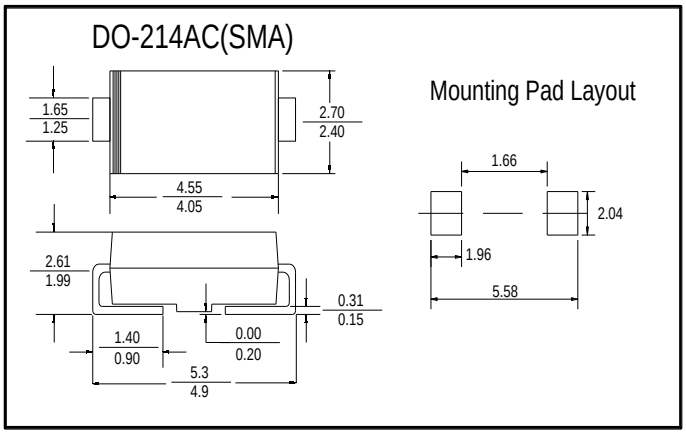
■ Features

- I_o 1.0A
- VRRM 50V-600V
- High surge current capability

■ Applications

- Rectifier

■ Outline Dimensions and Mark



■ Limiting Values (Absolute Maximum Rating)

Item	Symbol	Unit	Conditions	ES1							
				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, Ta=50℃	1.0							
Surge(Non-repetitive)Forward Current	I_{FSM}	A	60Hz Half-sine wave,1 cycle, Ta=25℃	30							
Junction Temperature	T_J	℃		-55 ~ +150							
Storage Temperature	T_{STG}	℃		-55 ~ +150							

■ Electrical Characteristics (T_a=25℃ Unless otherwise specified)

Item	Symbol	Unit	Test Condition		ES1							
					A	B	C	D	F	G	H	J
Peak Forward Voltage	V_{FM}	V	I_{FM}=1.0A		0.95				1.3		1.7	
Peak Reverse Current	I_{RRM1}	μA	V_{RM}=V_{RRM}	T_a=25℃	5							
	I_{RRM2}			T_a=125℃	50							
Reverse Recovery time	trr	ns	I_F=0.5A I_R=1A I_{RR}=0.25A		35							
Thermal Resistance(Typical)	$R_{\theta J-A}$	℃/W	Between junction and ambient		55							
	$R_{\theta J-L}$		Between junction and lead		25							

■ Characteristics(Typical)

FIG.1: FORWARD CURRENT DERATING CURVE

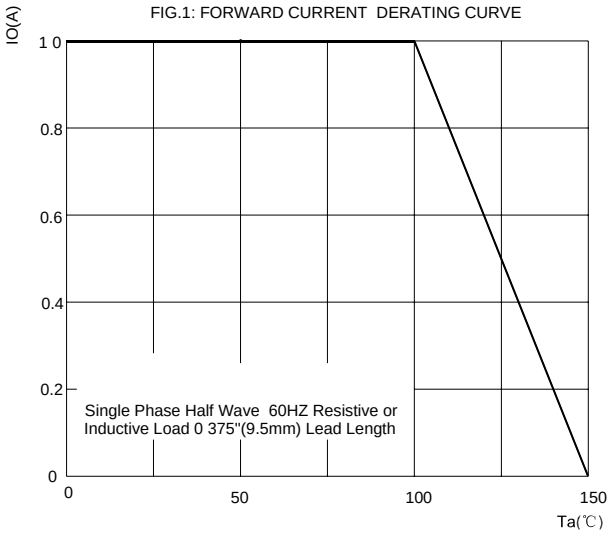


FIG.2:MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

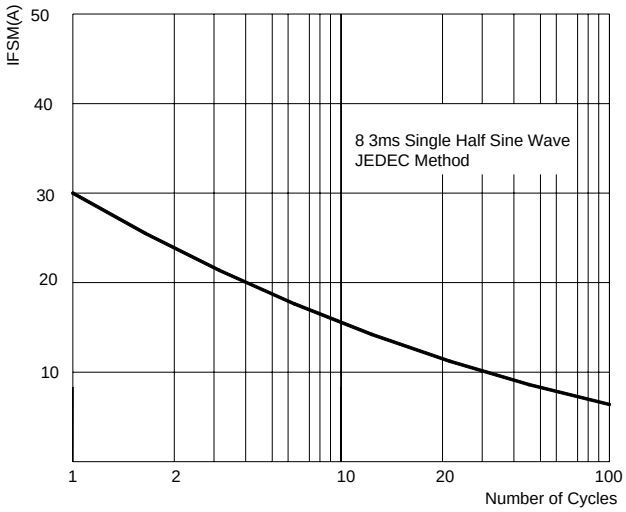


FIG.3: TYPICAL FORWARD CHARACTERISTICS

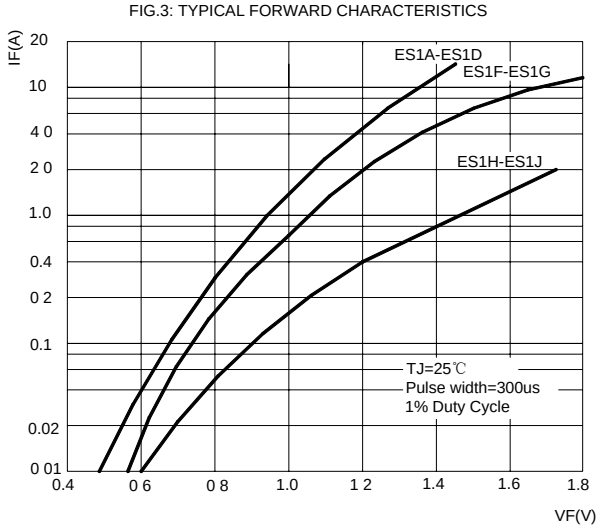


FIG.4:TYPICAL REVERSE CHARACTERISTICS

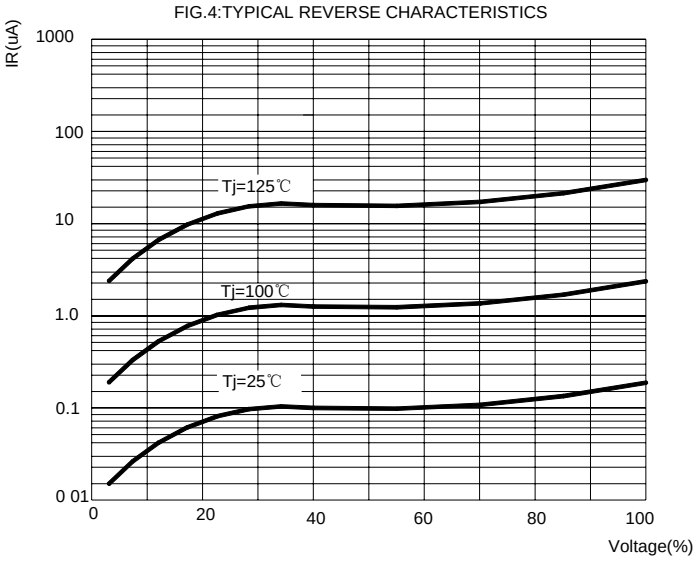


FIG.5: Diagram of circuit and Testing wave form of reverse recovery time