



Super Fast Recovery Rectifier Diode

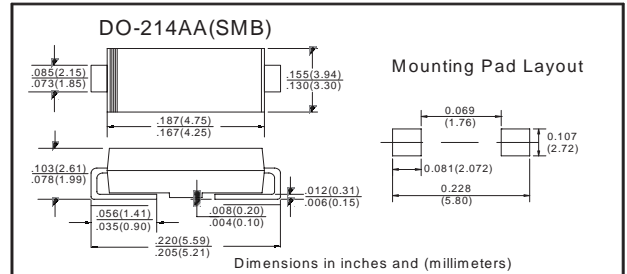
■ Features

- I_o 3.0A
- V_{RRM} 50V-600V
- High surge current capability
- Cases: Molded plastic

■ Applications

- Rectifier

■ Outline Dimensions and Mark



■ Limiting Values (Absolute Maximum Rating)

Item	Symbol	Unit	Test Conditions	ES3							
				AB	BB	CB	DB	FB	GB	HB	JB
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, $T_L=100^{\circ}C$	3.0							
Surge(Non-repetitive)Forward Current	I_{FSM}	A	60Hz Half-sine wave ,1 cycle , $T_a=25^{\circ}C$	100							
Junction Temperature	T_J	$^{\circ}C$		-55~+150							
Storage Temperature	T_{STG}	$^{\circ}C$		-55 ~ +150							

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

Item	Symbol	Unit	Test Condition	ES3							
				AB	BB	CB	DB	FB	GB	HB	JB
Peak Forward Voltage	V_F	V	$I_F=3.0A$	0.95			1.3		1.7		
Maximum reverse recovery time	t_{rr}	ns	$I_F=0.5A, I_R=1.0A, I_{rr}=0.25A$	35							
Peak Reverse Current	I_{RRM1}	μA	$V_{RM}=V_{RRM}$	$T_a=25^{\circ}C$				10			
	I_{RRM2}			$T_a=100^{\circ}C$				500			
Thermal Resistance(Typical)	$R_{\theta J-A}$	$^{\circ}C/W$	Between junction and ambient	47 ¹⁾							
	$R_{\theta J-L}$		Between junction and terminal	12 ¹⁾							

Notes:

- 1) Thermal resistance from junction to ambient and from junction to lead mounted on P.C.B. with 0.2" x 0.2" (5.0 mm x 5.0 mm) copper pad areas

■ Characteristics(Typical)

FIG.1: FORWARD CURRENT DERATING CURVE

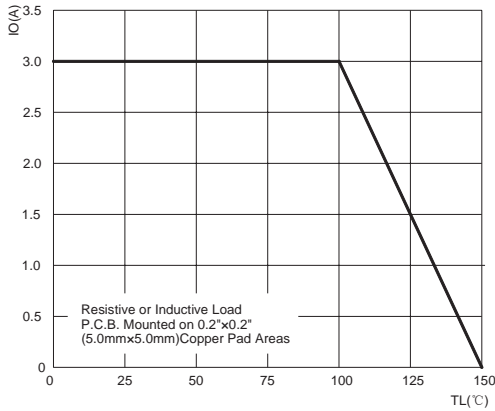


FIG.2: MAXIMUM NON-REPETITIVE FORWARD URGE CURRENT

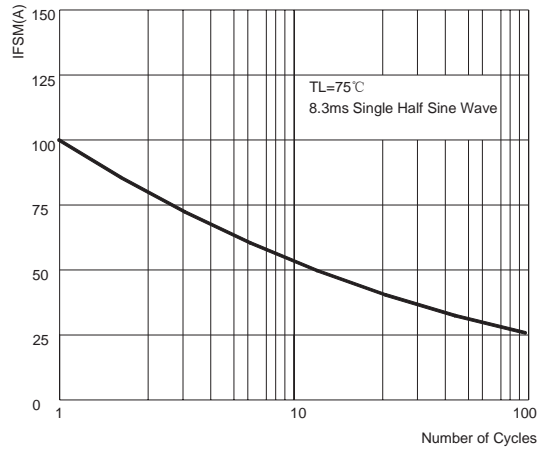


FIG.3: TYPICAL FORWARD CHARACTERISTICS

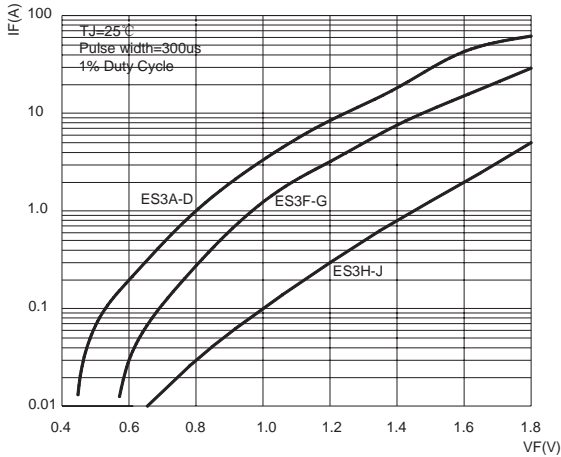


FIG.4: TYPICAL REVERSE CHARACTERISTICS

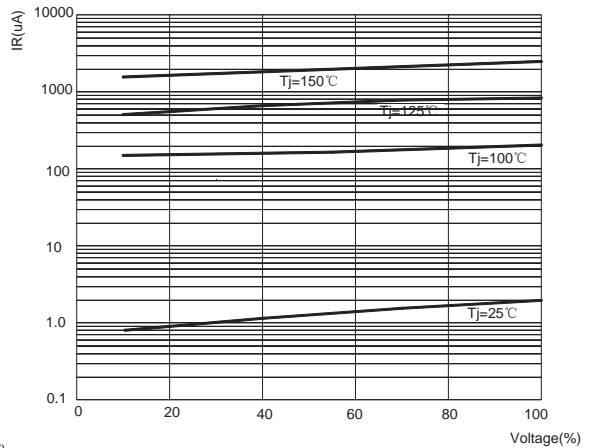


FIG.5: Diagram of circuit and Testing wave form of reverse recovery time

