



Super Fast Recovery Rectifier Diode

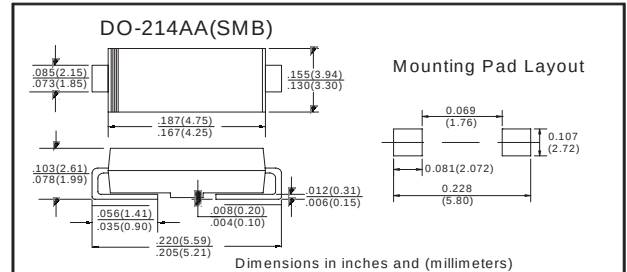
■ Features

- 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 _{tr}	ns	I _F =0.5A, I _R =1.0A, I _{RI} =0.25A	35							
Peak Reverse Current	I _{RRM1}	μA	V _{RM} =V _{RRM}	T _a =25℃				10			
	T _a =100℃				500						
Thermal Resistance(Typical)	R _{θJ-A}	℃/W	Between junction and ambient	47 ¹⁾							
	R _{θJ-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

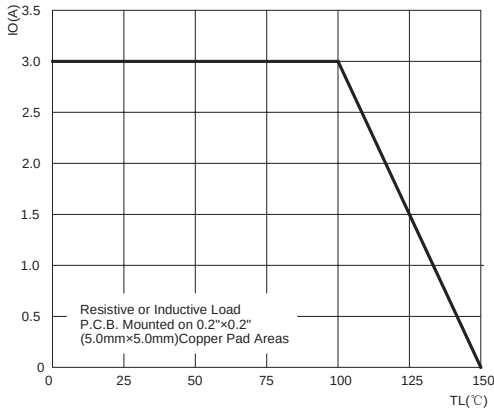


FIG.2: MAXIMUM NON-REPETITIVE FORWARD URGE CURRENT

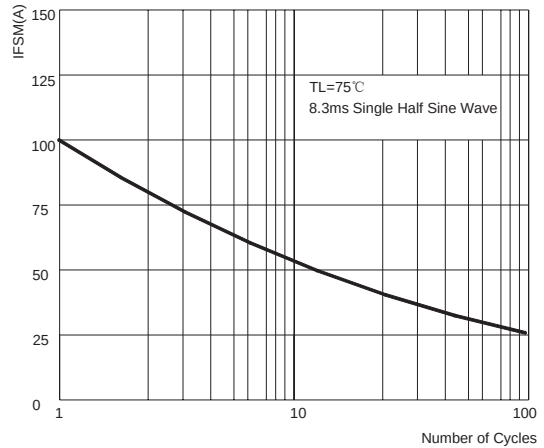


FIG.3: TYPICAL FORWARD CHARACTERISTICS

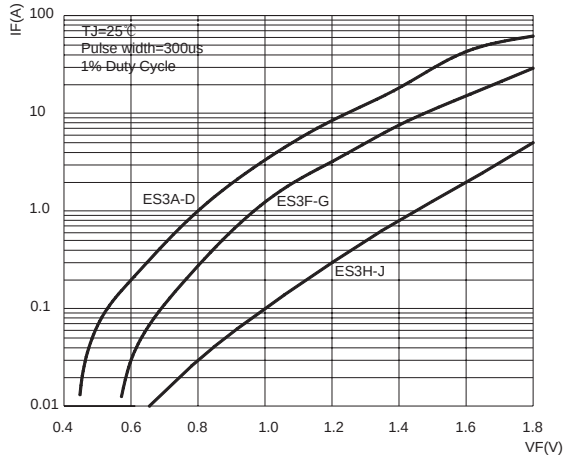


FIG.4: TYPICAL REVERSE CHARACTERISTICS

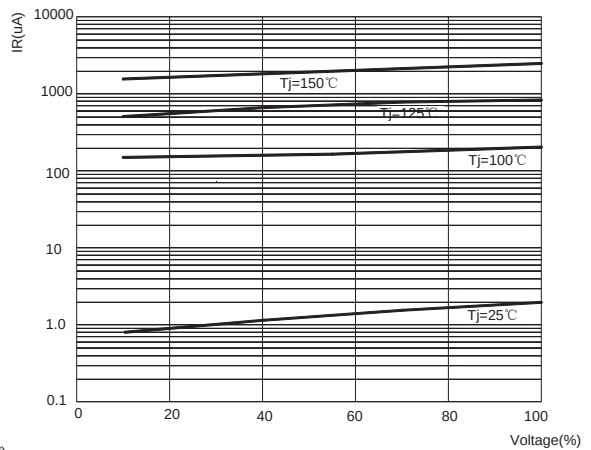


FIG.5: Diagram of circuit and Testing wave form of reverse recovery time

