

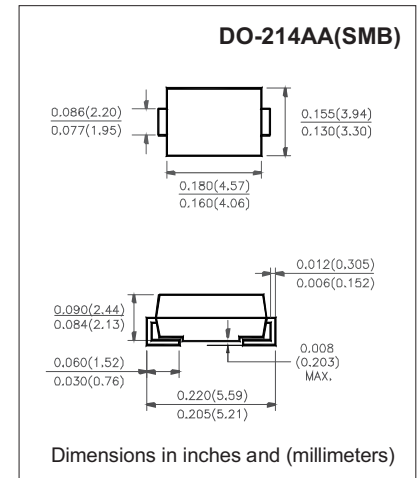
SUPER FAST RECOVERY RECTIFIER DIODE

FEATURES

- I_O 3.0A
- V_{RRM} 50V-800V
- High surge current capability
- Cases: Molded plastic

APPLICATIONS

- Rectifier



ABSOLUTE MAXIMUM RATING(LIMITING VALUES)

Item	Symbol	Unit	Test Conditions	ES3								
				AB	BB	CB	DB	FB	GB	HB	JB	KB
Repetitive Peak Reverse Voltage	V_{RRM}	V		50	100	150	200	300	400	500	600	800
Average Forward Current	$I_{F(AV)}$	A	60HZ Half-sine wave, Resistance load, $T_L=100$	3.0								
Surge(Non-repetitive) Forward Current	I_{FSM}	A	60Hz Half-sine wave, 1 cycle, T_a	100								
Junction Temperature	T_J			-55~+150								
Storage Temperature	T_{STG}			-55 ~ +150								

ELECTRICAL CHARACTERISTICS $T_A=25\text{ }^\circ\text{C}$

Item Unit	Symbol		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		1.85
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}	\dot{I} A	$V_{RM}=V_{RRM}$	$T_a=25$		10					
	I_{RRM2}			$T_a=100$		500					
Thermal Resistance(Typical)	$R_{\theta J-A}$		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.

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CHARACTERISTICS(TYPICAL) CURVES ES3AB - ES3KB

FIG.1: FORWARD CURRENT DERATING CURVE

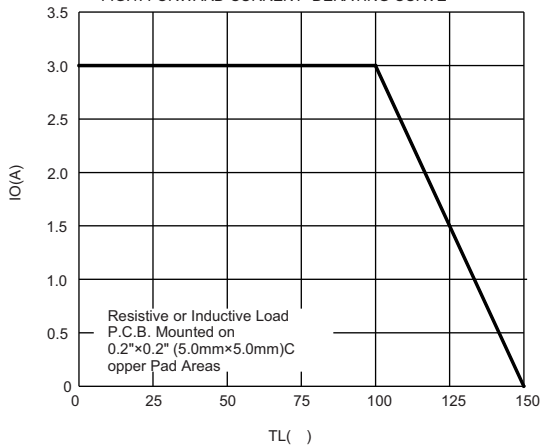


FIG.2: MAXIMUM NON-REPETITIVE FORWARD URGE CURRENT

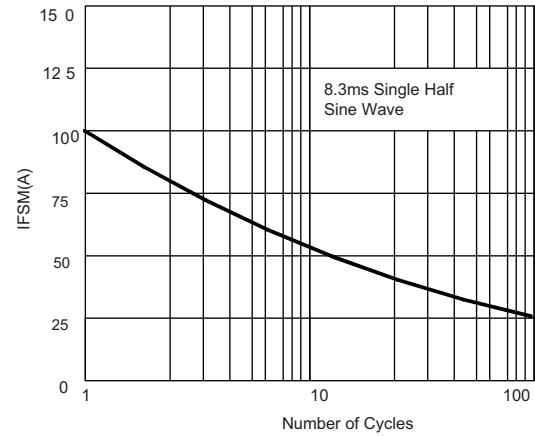


FIG.3: TYPICAL FORWARD CHARACTERISTICS

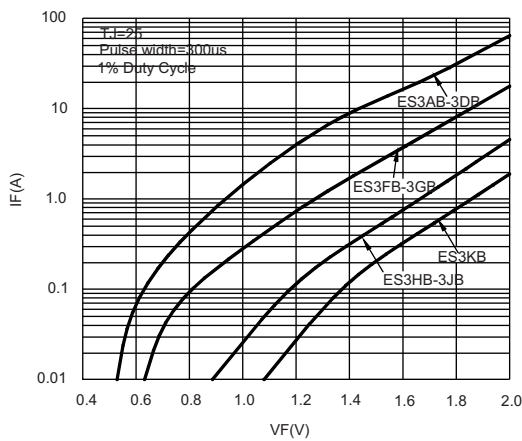


FIG.4 : TYPICAL REVERSE CHARACTERISTICS

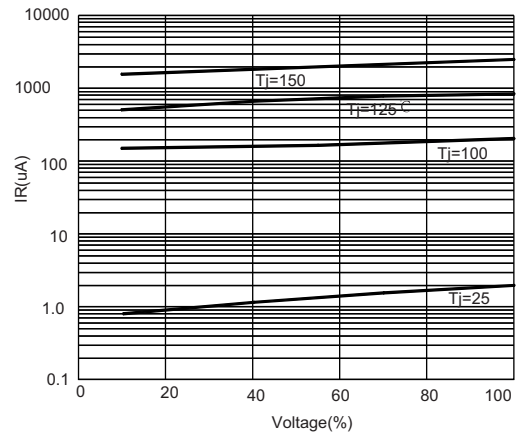
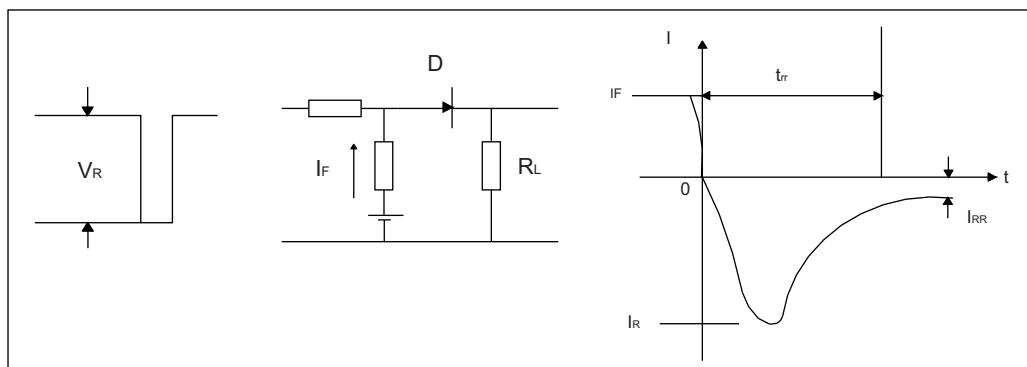


FIG.5: Diagram of circuit and Testing wave form of reverse recovery time



Disclaimer

All product, product specifications and data are subject to change without notice to improve reliability, function or design or otherwise.