

High Efficient Rectifier

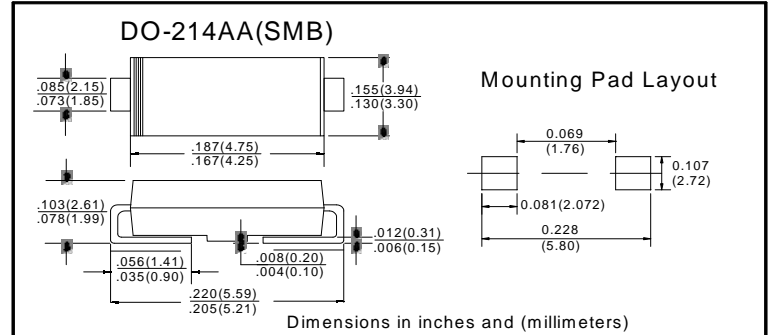
■ Features

- I_o 2A
- V_{RRM} 50V-1000V
- High surge current capability
- Cases: Molded plastic

■ Applications

- Rectifier

■ Outline Dimensions and Mark



■ Limiting Values (Absolute Maximum Rating)

Item	Symbol	Unit	Test Conditions	US2						
				A	B	D	G	J	K	M
Repetitive Peak Reverse Voltage	V_{RRM}	V		50	100	200	400	600	800	1000
Average Forward Current	$I_{F(AV)}$	A	60HZ Half-sine wave, Resistance load, $T_L=110^{\circ}C$	2.0						
Surge(Non-repetitive)Forward Current	I_{FSM}	A	60Hz Half-sine wave , 1 cycle , $T_a=25^{\circ}C$	50						
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	US2						
				A	B	D	G	J	K	M
Peak Forward Voltage	V_F	V	$I_F=2.0A$	1.0			1.3		1.7	
Maximum reverse recovery time	t_{rr}	ns	$I_F=0.5A, I_R=1.0A, I_{rr}=0.25A$	50					75	
Peak Reverse Current	I_{RRM1}	μA	$V_{RM}=V_{RRM}$				5.0			
	I_{RRM2}						100			
Thermal Resistance(Typical)	$R_{\theta J-A}$	$^{\circ}C/W$	Between junction and ambient		80 ¹⁾					
	$R_{\theta J-L}$		Between junction and terminal		20 ¹⁾					

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

RATINGS AND CHARACTERISTIC CURVES

FIG.1: FORWARD CURRENT DERATING CURVE

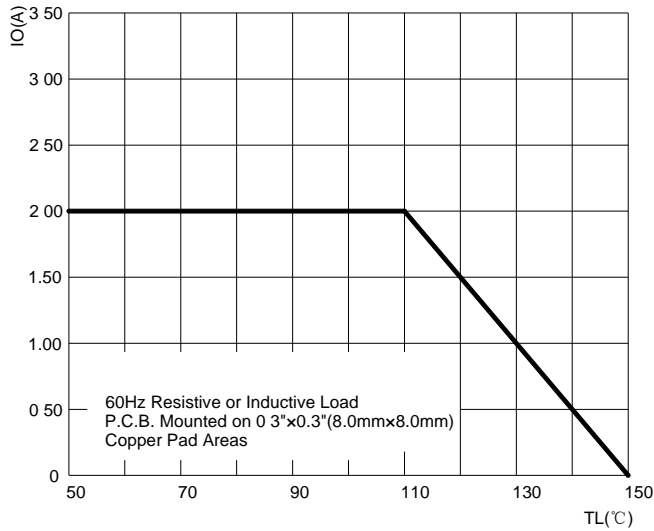


FIG.2: MAXIMUM NON-REPETITIVE FORWARD URGE CURRENT

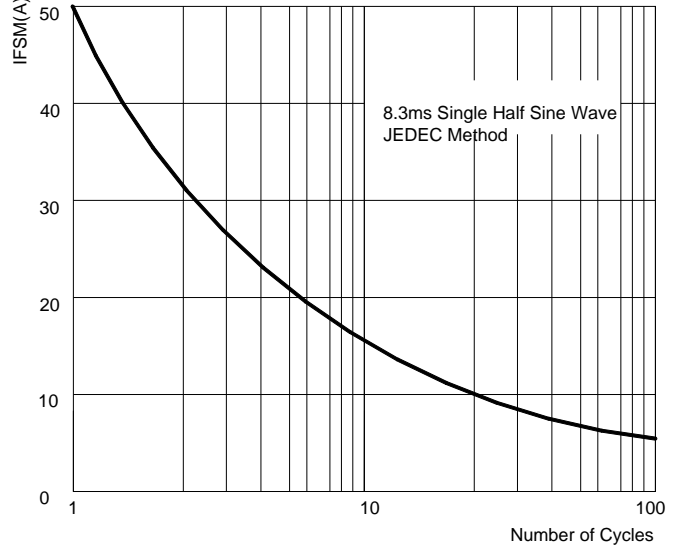


FIG.3: TYPICAL FORWARD CHARACTERISTICS

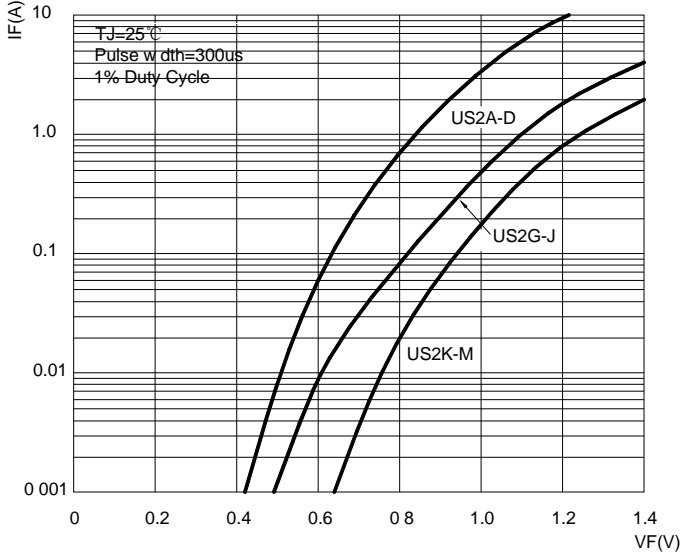


FIG.4: TYPICAL REVERSE CHARACTERISTICS

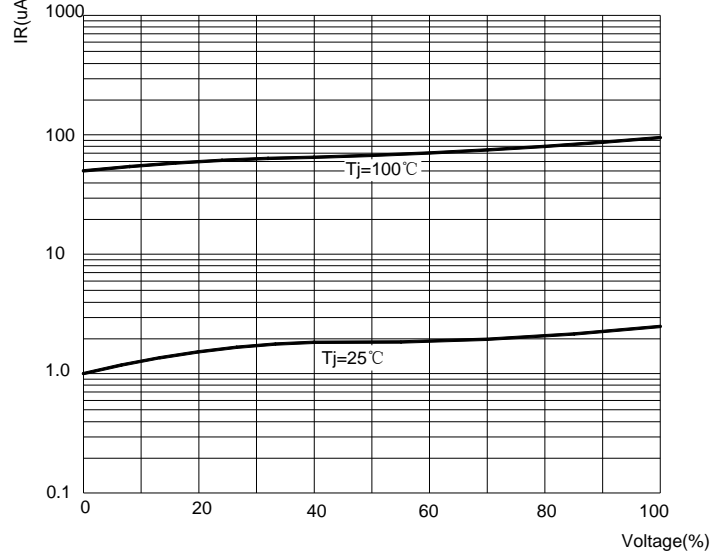


FIG.5: Diagram of circuit and Testing wave form of reverse recovery time

