

## High Efficient Rectifier

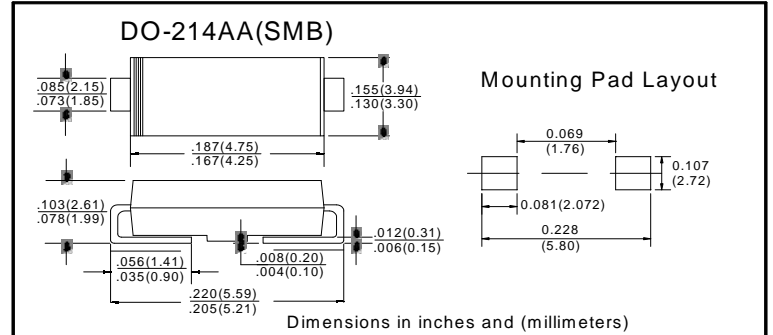
### ■ Features

- $I_o$  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, $T_L=110^\circ\text{C}$	2.0						
Surge(Non-repetitive)Forward Current	$I_{FSM}$	A	60Hz Half-sine wave , 1 cycle , $T_a=25^\circ\text{C}$	50						
Junction Temperature	$T_J$	$^\circ\text{C}$		-55~+150						
Storage Temperature	$T_{STG}$	$^\circ\text{C}$		-55 ~ +150						

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

Item	Symbol	Unit	Test Condition	US2						
				A	B	D	G	J	K	M
Peak Forward Voltage	$V_F$	V	$I_F=2.0\text{A}$	1.0			1.3		1.7	
Maximum reverse recovery time	$t_{rr}$	ns	$I_F=0.5\text{A}, I_R=1.0\text{A}, I_{rr}=0.25\text{A}$	50					75	
Peak Reverse Current	$I_{RRM1}$	$\mu\text{A}$	$V_{RM}=V_{RRM}$				5.0			
	$I_{RRM2}$						100			
Thermal Resistance(Typical)	$R_{\theta J-A}$	$^\circ\text{C/W}$	Between junction and ambient		80 <sup>1)</sup>					
	$R_{\theta J-L}$		Between junction and terminal		20 <sup>1)</sup>					

### 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

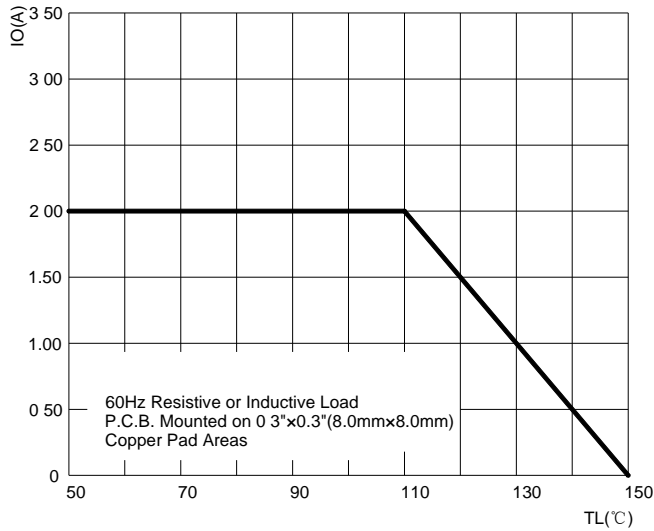


FIG.2: MAXIMUM NON-REPETITIVE FORWARD URGE CURRENT

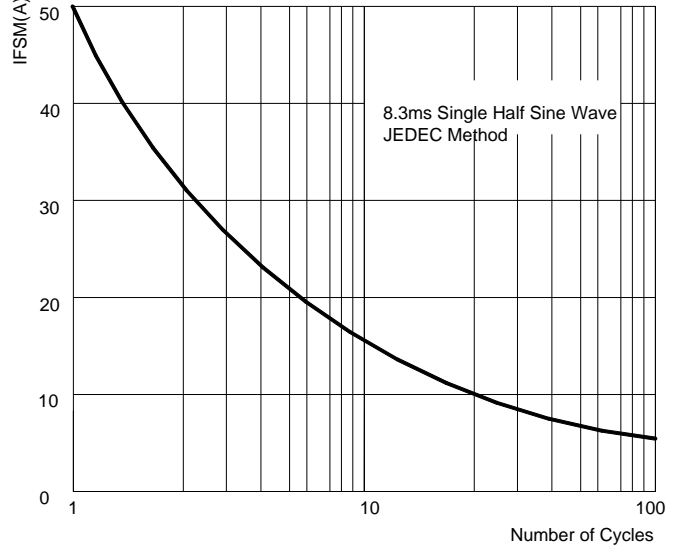


FIG.3: TYPICAL FORWARD CHARACTERISTICS

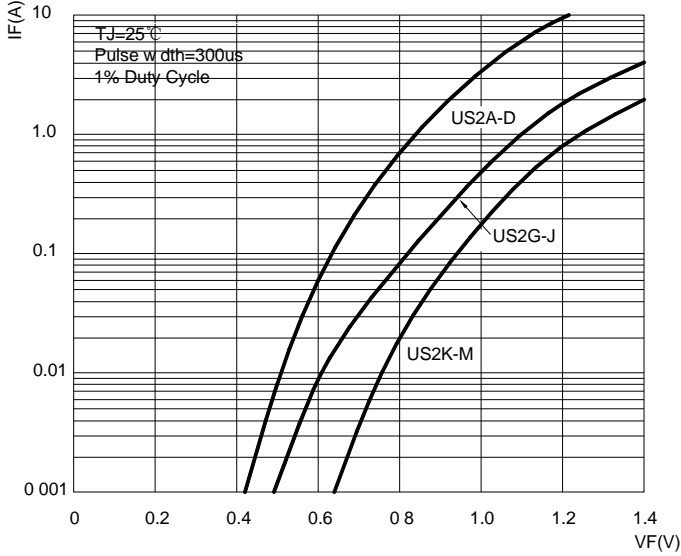


FIG.4: TYPICAL REVERSE CHARACTERISTICS

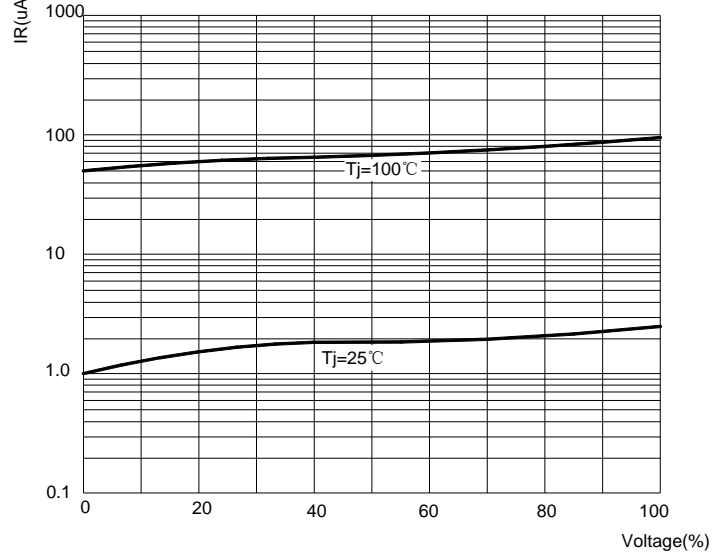


FIG.5: Diagram of circuit and Testing wave form of reverse recovery time

