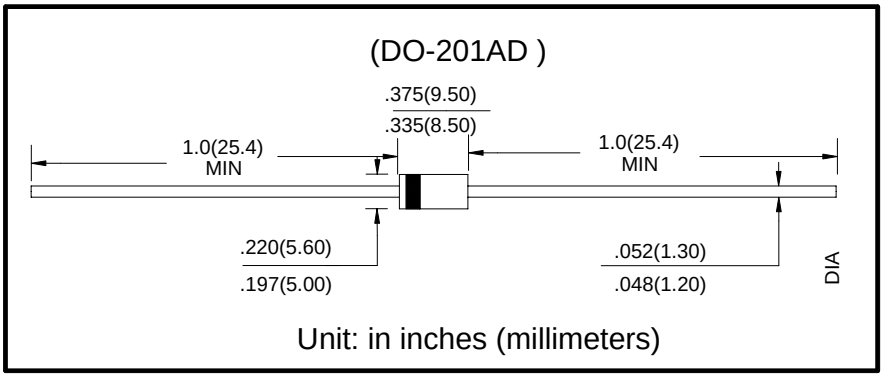
Fast Recovery Rectifier

■ Features

- ●I_o 3.0A
- ●VRRM 50V-1000V
- ●High surge current capability

■ Outline Dimensions and Mark



■ Applications

- Rectifier

■ Limiting Values (Absolute Maximum Rating)

Item	Symbol	Unit	Conditions	FR						
				301	302	303	304	305	306	307
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, Ta=50℃	3						
Surge(Non-repetitive)Forward Current	I_{FSM}	A	60Hz Half-sine wave,1 cycle, Ta=25℃	150						
Junction Temperature	T_J	℃		-55~+125						
Storage Temperature	T_{STG}	℃		-55 ~ +150						

■ Electrical Characteristics (T_a=25℃ Unless otherwise specified)

Item	Symbol	Unit	Test Condition		FR						
					301	302	303	304	305	306	307
Peak Forward Voltage	V_{FM}	V	I_{FM}=3.0A		1.3						
Peak Reverse Current	I_{RRM1}	μA	$V_{RM}=V_{RRM}$	Ta=25℃	5						
	I_{RRM2}			Ta=125℃	50						
Reverse Recovery time	t_{rr}	ns	I_F=0.5A I_R=1A I_{RR}=0.25A		150				250	500	
Thermal Resistance(Typical)	$R_{\theta J-A}$	℃/W	Between junction and ambient		20						
	$R_{\theta J-L}$		Between junction and lead		10						

■ Characteristics(Typical)

FIG.1: FORWARD CURRENT DERATING CURVE

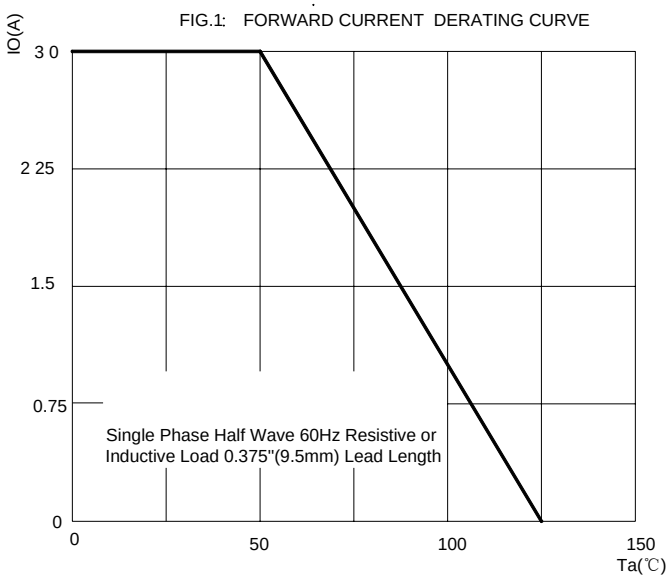


FIG.2: MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

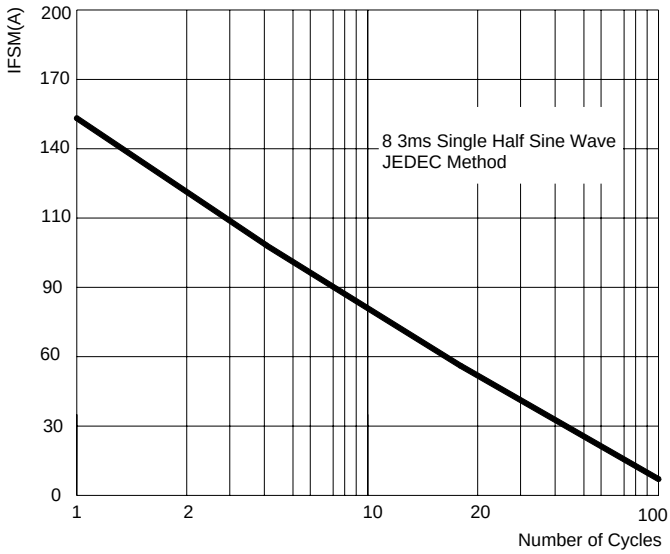


FIG.3: TYPICAL FORWARD CHARACTERISTICS

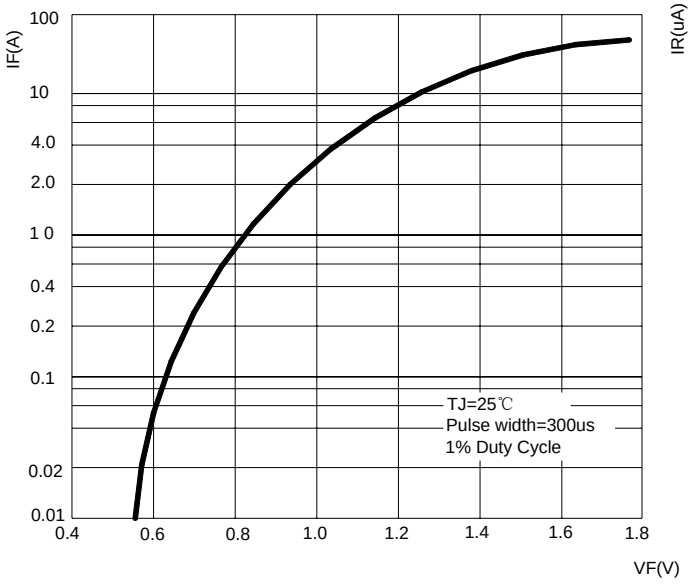


FIG.4:TYPICAL REVERSE CHARACTERISTICS

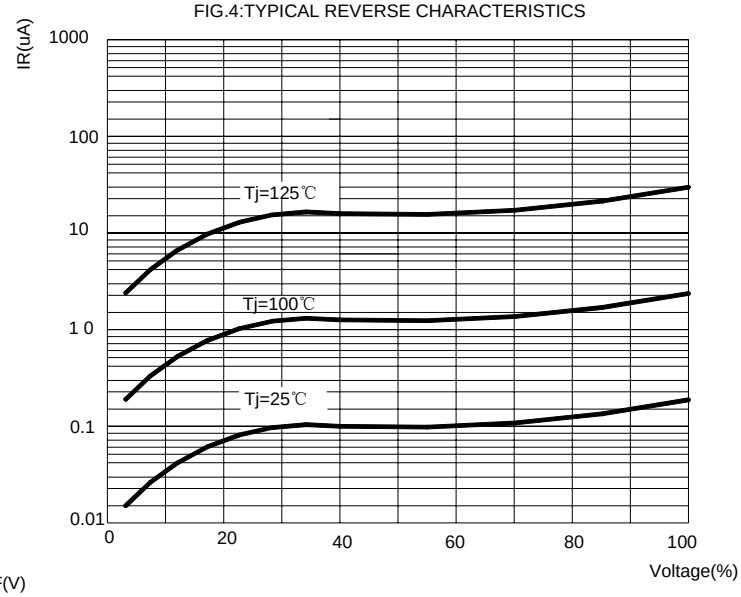


FIG.5: Diagram of circuit and Testing wave form of reverse recovery time