



GP
ELECTRONICS

R2000-R5000

2000~5000V-0.2A General Purpose Rectifier

R2000-R5000 General Purpose Rectifier

Feature

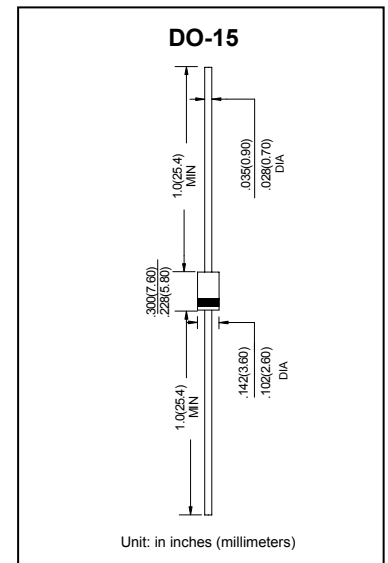
- I_o 0.2A
- V_{RRM} 2000V-5000V
- Low reverse leakage
- High surge current capability

Application

- Rectifier

Marking

- RX000
X : From 2 To 5



ABSOLUTE MAXIMUM RATINGS ($T_a=25^\circ\text{C}$ unless otherwise noted)

Parameter	Symbol	R				Unit
		2000	3000	4000	5000	
Repetitive Peak Reverse Voltage	V_{RRM}	2000	3000	4000	5000	V
Maximum RMS Voltage	V_{RMS}	1400	2100	2800	3500	V
Average Forward Current 60Hz Half-sine wave, Resistance load, $T_a=50^\circ\text{C}$	$I_{F(AV)}$	0.2				A
Non-repetitive Peak Forward Surge Current 60Hz Half-sine wave, 1 cycle, $T_a=25^\circ\text{C}$	I_{FSM}	30				A
Junction Temperature	T_J	-55 ~ +125				$^\circ\text{C}$
Storage Temperature	T_{STG}	-55 ~ +150				$^\circ\text{C}$

ELECTRICAL CHARACTERISTICS ($T_a=25^\circ\text{C}$ unless otherwise noted)

Parameter	Symbol	Test Condition	R2000	R3000	R4000	R5000	Unit
Peak Forward voltage	V_{FM}	$I_{FM}=0.2A$	3	4	5		V
Peak Reverse Current	I_{RRM1}	$V_{RM}=V_{RRM}$	$T_a=25^\circ\text{C}$		5		μA
	I_{RRM2}				50		μA
Thermal Resistance(Typical)	$R_{\theta J-A}$	Between junction and ambient	50				$^\circ\text{C/W}$
	$R_{\theta J-L}$	Between junction and lead	30				$^\circ\text{C/W}$
Typical Junction capacitance	C_J	Measured at 1.0MHz and applied reverse voltage of 4.0 volts.	25				pF
Maximum reverse recovery	t_{rr}	$I_F=0.5A, I_R=1A, I_{rr}=0.25A$	2.5				us

Typical Characteristics

FIG.1: FORWARD CURRENT DERATING CURVE

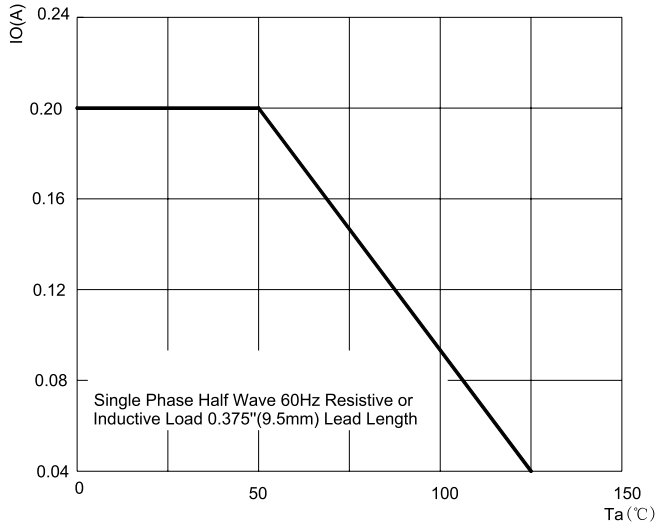


FIG.2: MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

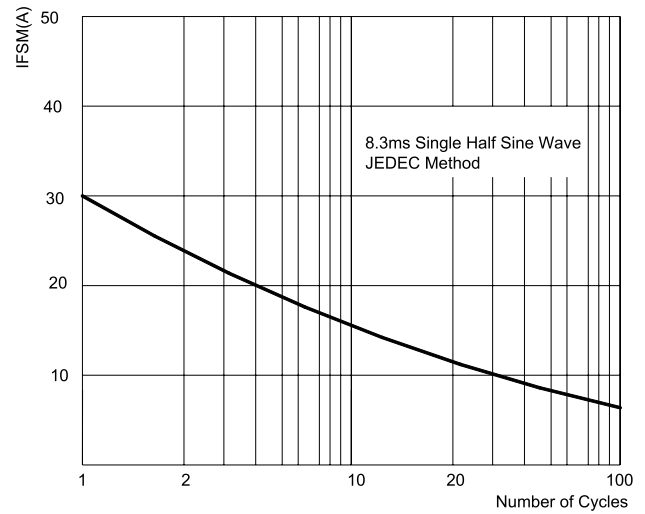


FIG.3: TYPICAL FORWARD CHARACTERISTICS

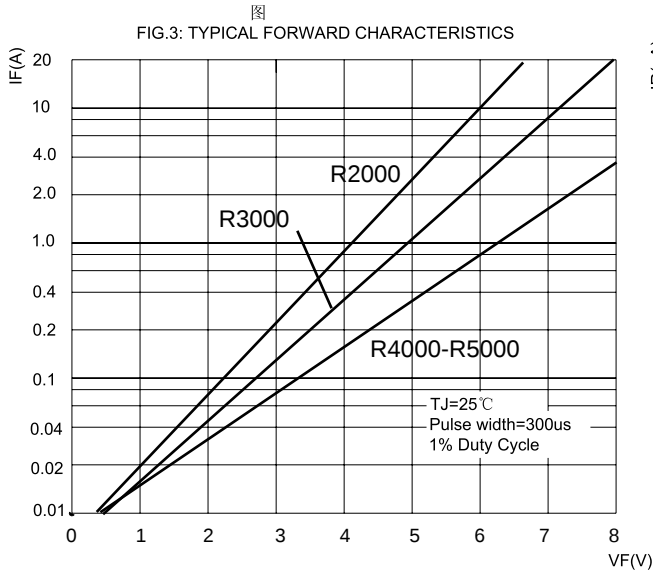


FIG.4: TYPICAL REVERSE CHARACTERISTICS

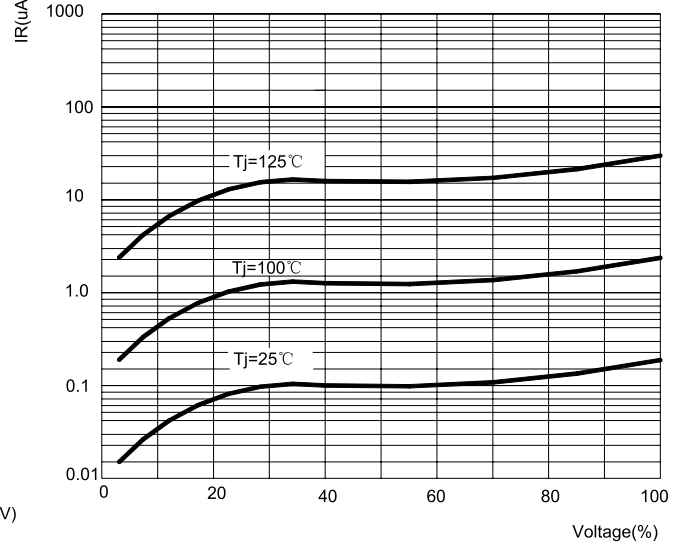


FIG5: Typical Junction Capacitance

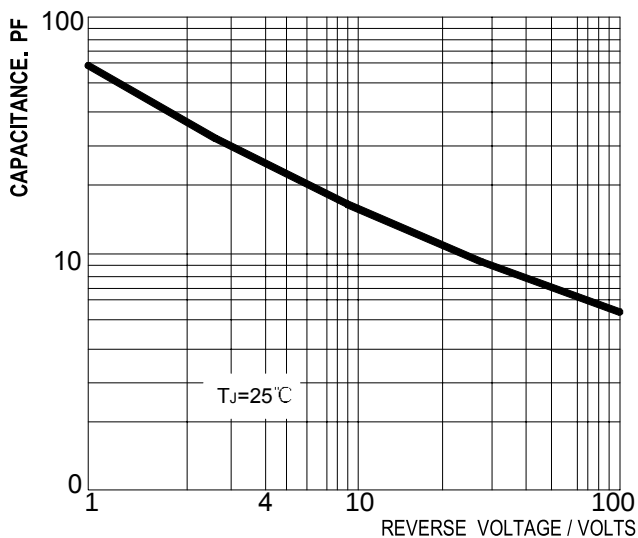


FIG.6: Diagram of circuit and Testing wave form of reverse recovery time

