SPECIFICATION

DEVICE NAME : SILICON DIODE

TYPE NAME : ERW05－060

SPEC. No. :

DATE :

Fuji Electric Co.,Ltd.

This Specification is subject to change without notice.

	DATE	NAME	APPROVED
DRAWN			
CHECKED			

Fuji Electric Co.,Ltd.

DWG.NO.

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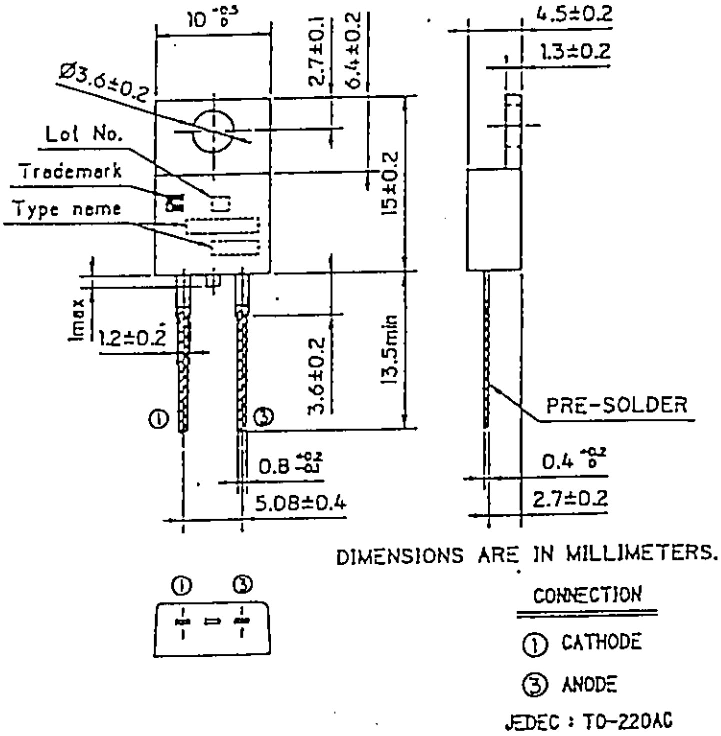
Ratings and characteristics of Fuji silicon diode

ERW05−060

1. Outline Drawing



DIMENSIONS ARE IN MILLIMETERS.

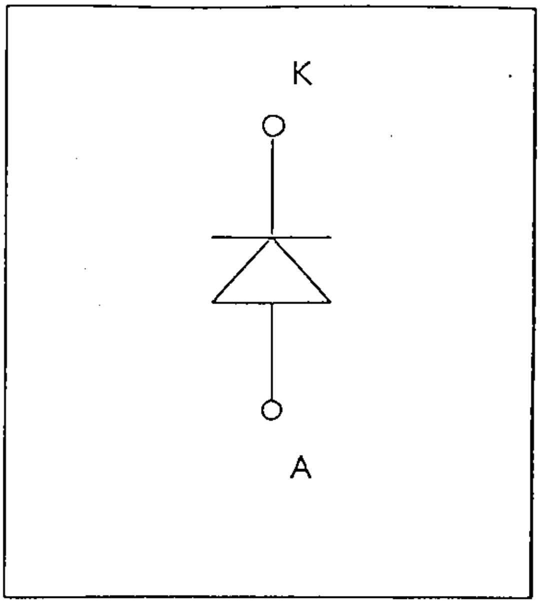
CONNECTION

① CATHODE

③ ANODE

JEDEC : TO-220AC

2. Equivalent circuit



3. Absolute maximum ratings (Tc=25℃)

Items	Symbols	Conditions		Ratings	Units
Repetitive Reverse Voltage	V_{RRM}	――――		600	V
Repetitive peak surge current	I_{FM}	20kHz Duty50% Squ.wave	Tc= 81℃	30	A
			Tc= 25℃	46	A
Average rectiffied forward current	$I_{F(AV)}$	D C		28	A
Non-repetitive peak surge current	I_{FSM}	Pulse10ms, sin wave		110	A
Maximam Power Dissipaion	P_D	――――		70	W
Operating Temperature	Tj	――――		+150	℃
Storage Temperature	Tstg	――――		-40 ～+150	℃
Mounting Screw Torque	――	――――		50	N・cm

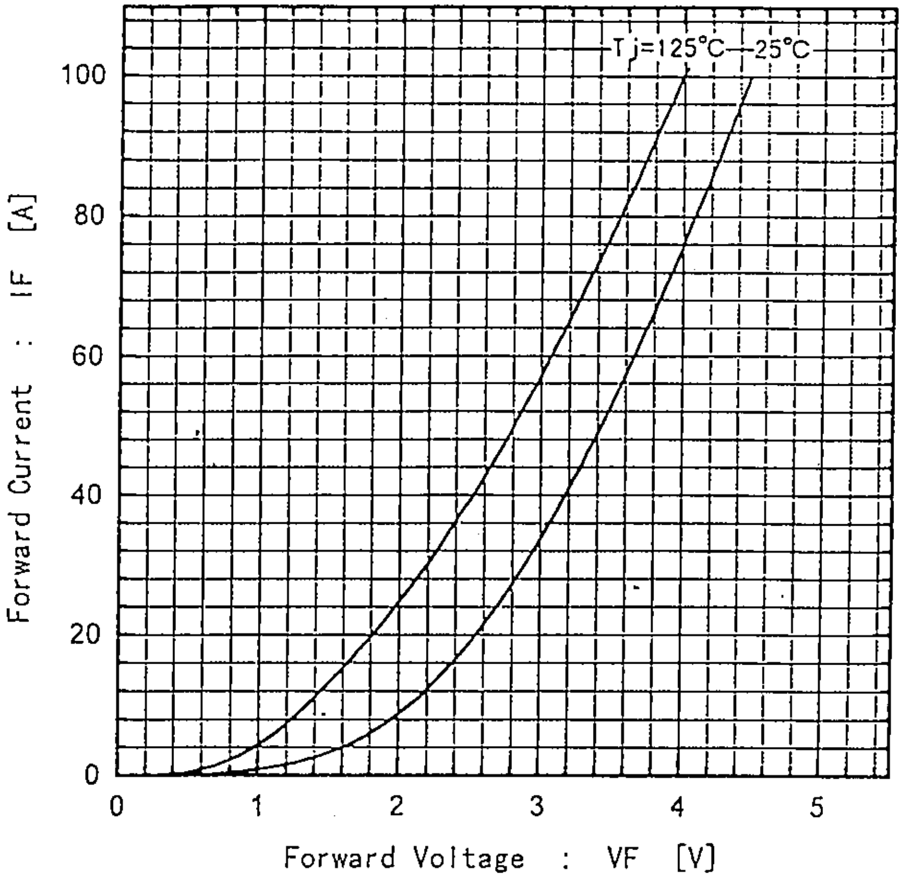
4. Electrical Characteristics (at Tc=25℃ unless otherwise specified)

Items	Symbols	Characteristics			Conditions	Unit
		min.	typ.	max.		
Reverse Current	I_R	—	—	1.0	V_R = 600 V	mA
foward voltage	VF	—	—	3.0	I_F =30A	V
Reverse recovery time	trr	—	—	0.3	IF=30A, VR=200V di/dt=100A/μs	μS

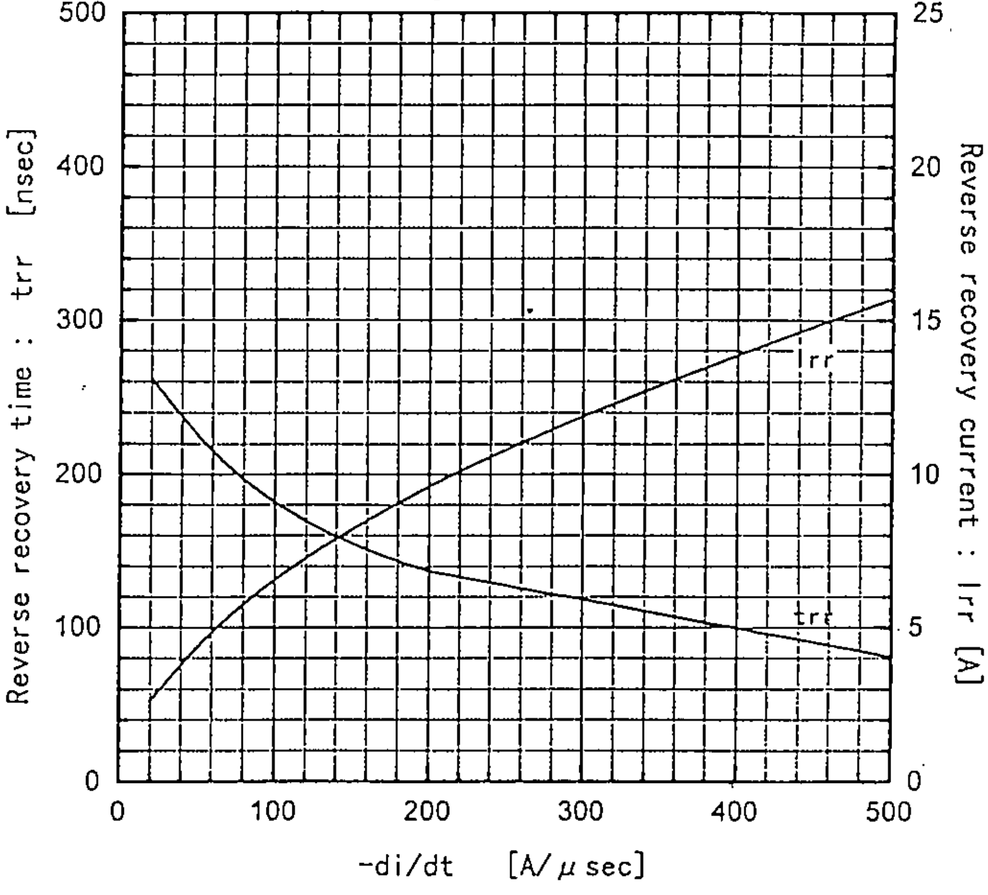
5. Thermal resistance characteristics

Items	Symbols	Characteristics			Conditions	Unit
		min.	typ.	max.		
Thermal resistance	Rth(j-c)	—	—	1.78	junction to case	℃/W

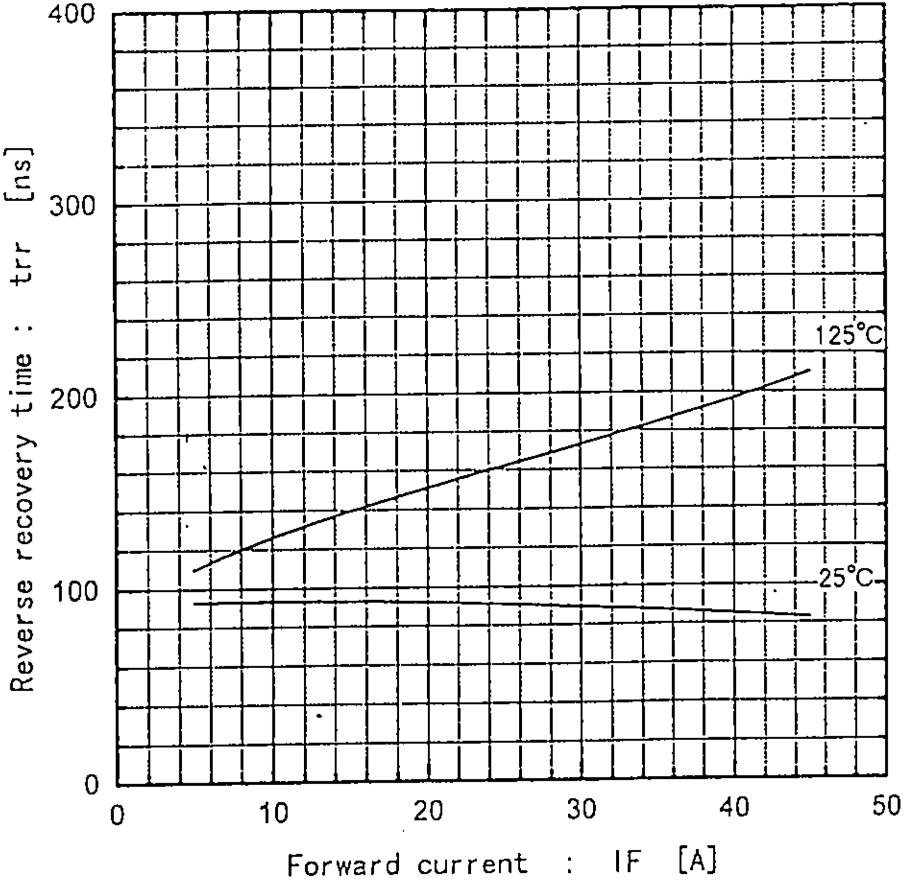
Forward voltage vs. Forward current



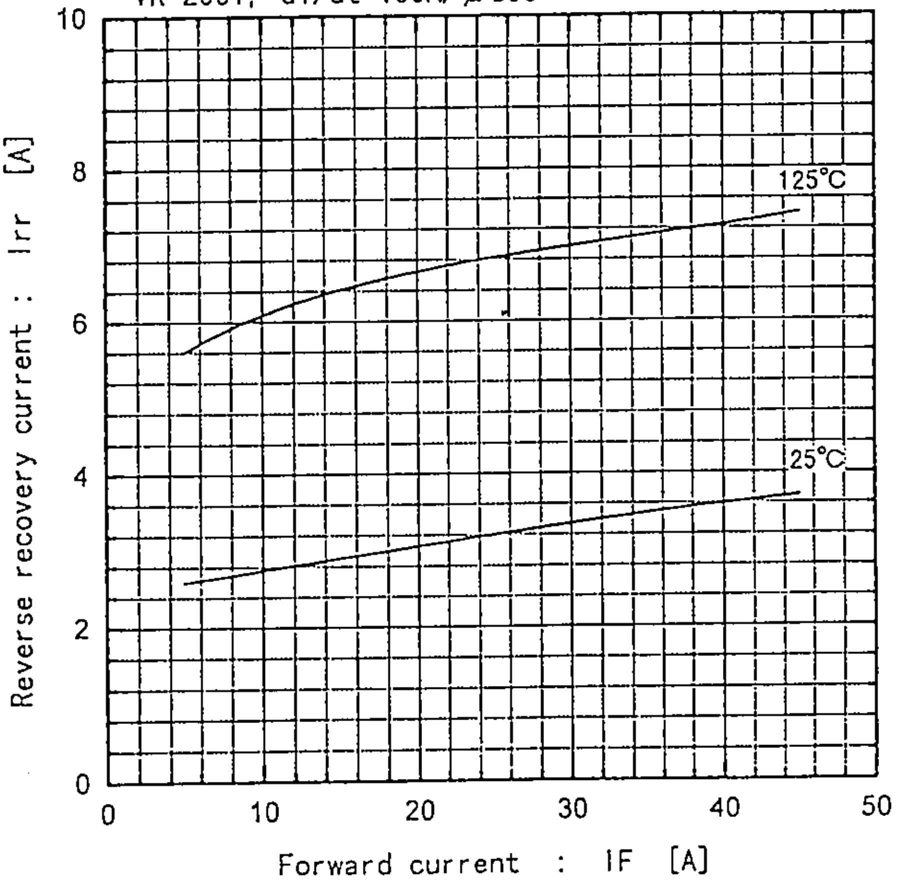
Reverse recovery chracteristics vs. -di/dt
VR=200V, IF=30A, Tj=125°C



Reverse recovery time vs. Forward current
VR=200V, -di/dt=100A/μ sec

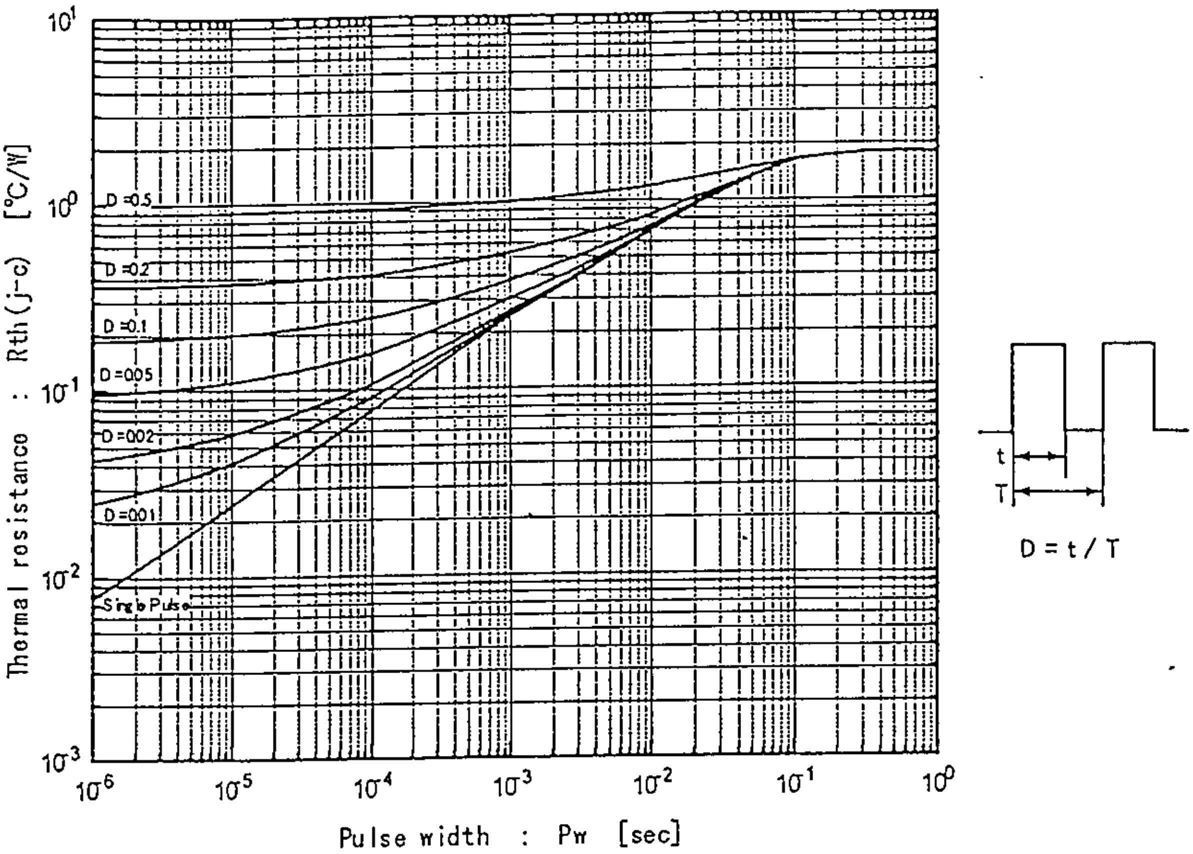


Reverse recovery current vs. Forward current
VR=200V, -di/dt=100A/μ sec

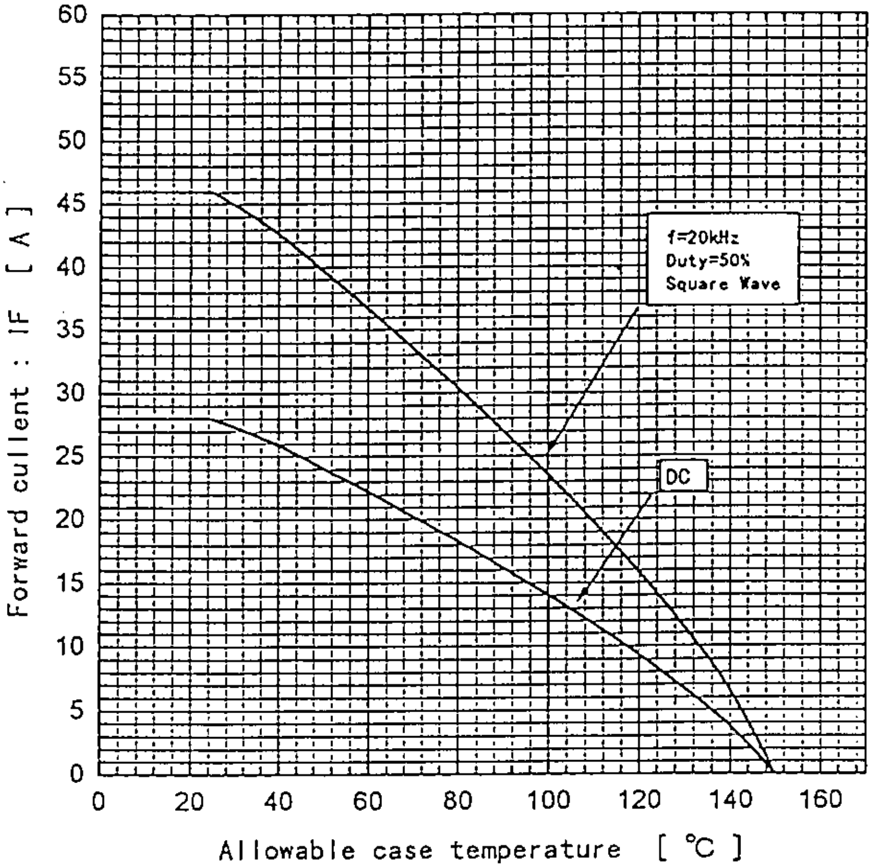


ERW05-060

Transient thermal resistance



Forward cullent vs. Max. allowable case temperature



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