SPECIFICATION

Device Name : SILICON DIODE

Type Name : ERW13-060

Spec. No. :

Fuji Electric Co.,Ltd.
Matsumoto Factory

	DATE	NAME	APPROVED
DRAWN			
CHECKED			

Fuji Electric Co.,Ltd.

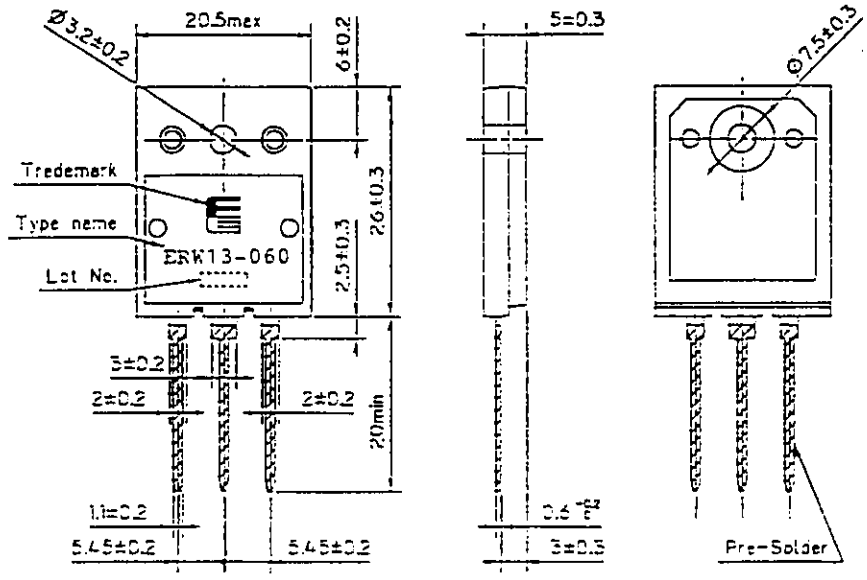
DWG.NO.

H04-004-07

Ratings and characteristics of Fuji silicon diode

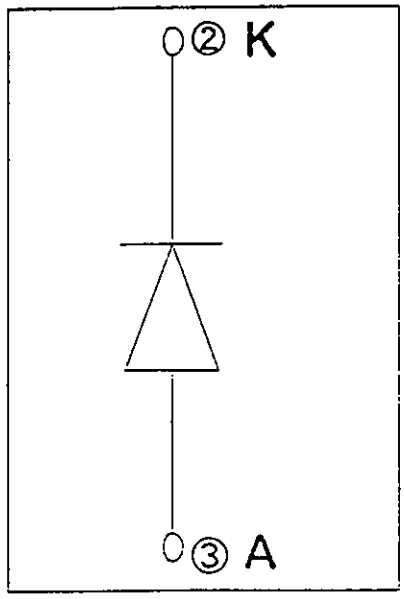
ERW13-060

1. Outline Drawing



① ② ③

2. Equivalent circuit



Connection
① Open
② Cathode
③ Anode

3. Absolute maximum ratings (Tc=25℃)

Items	Symbols			Ratings	Unit
Repetitive Reverse Voltage	VRRM	-		600	V
Repetitive Peak Surge Current	IFM	20kHz,Duty 50%	Tc= 90℃	50	A
		Squ. wave	Tc= 25℃	88	A
Average Rectified Forward Current	IF(AV)	DC		54	A
Non-repetitive Peak Surge Current	IFSM	Pulse 10ms,sin wave		125	A
Maximum Power Dissipation	PD	-		140	W
Operating Temperature	Tj	-		+150	℃
Storage Temperature	Tstg	-		-40～+150	℃
Mounting Screw Torque	-	-		70	N･cm

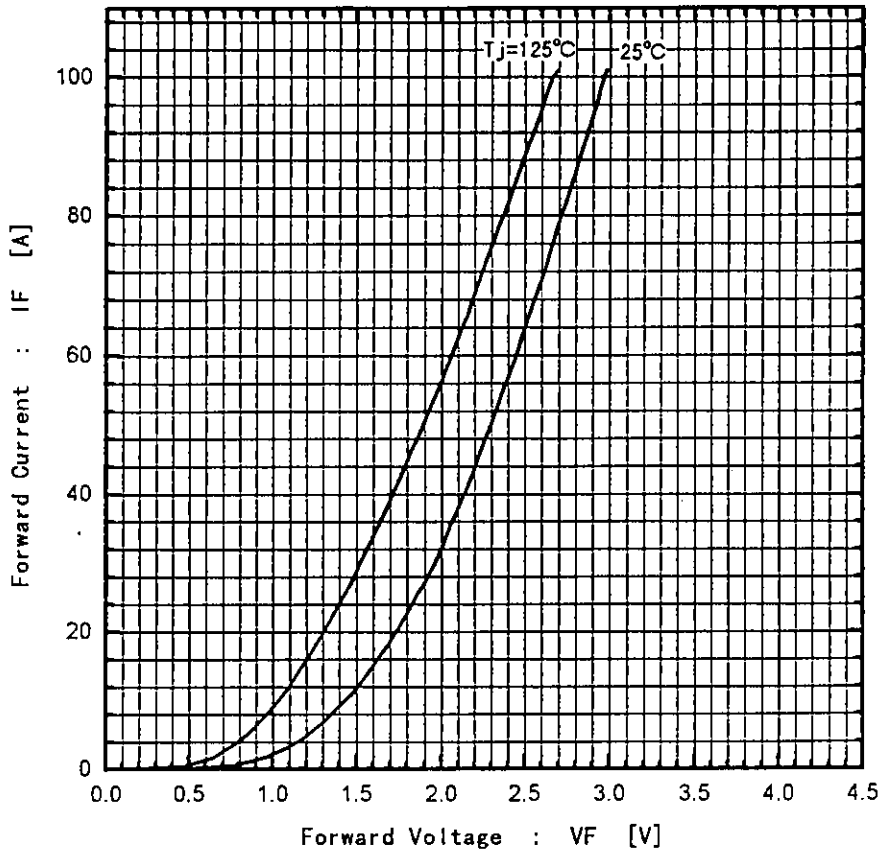
4.Electrical Characteristics (at Tc=25℃ unless otherwise specified)

Items	Symbols	Characteristics			Conditions	Unit
		min.	typ.	max.		
Reverse Current	IR	-	-	1.0	VR=600V	mA
Forward Voltage	VF	-	-	3.0	IF=50A	V
Reverse Recovery Time	trr	-	-	0.3	IF=50A,VR=200V di/dt=100A/μs	μs

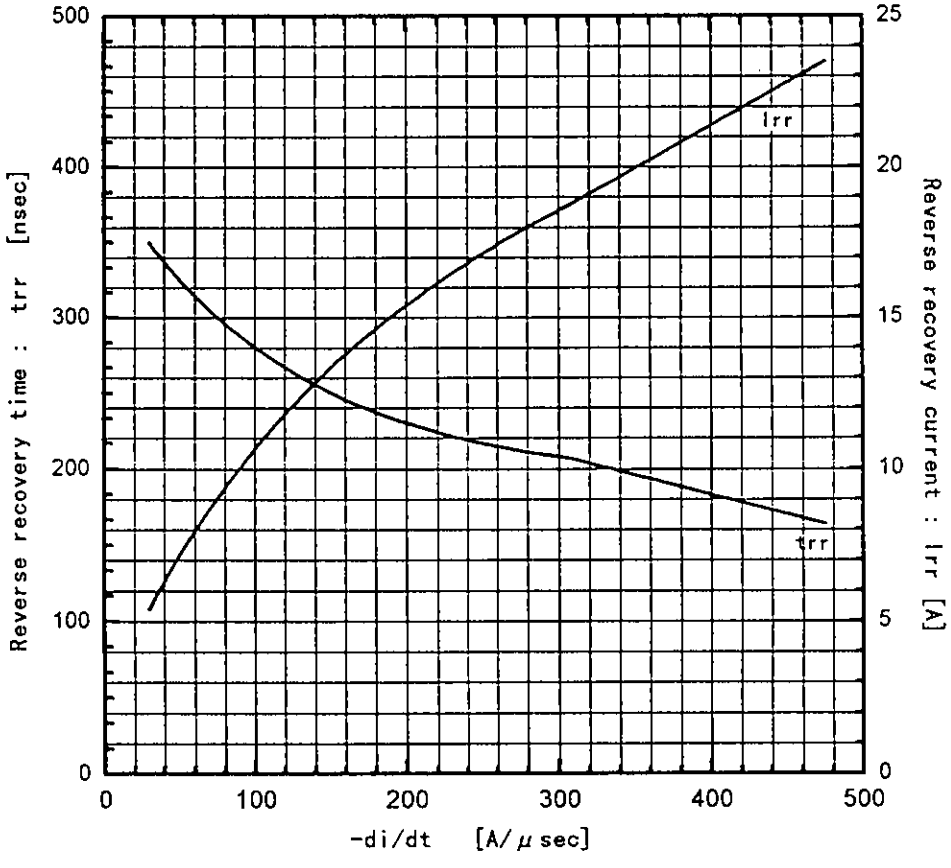
5. Thermal Resistance Characteristics

Items	Symbols	Characteristics			Conditions	Unit
		min.	typ.	max.		
Thermal resistance	Rth(j-c)	-	-	0.89	junction to cace	℃/W

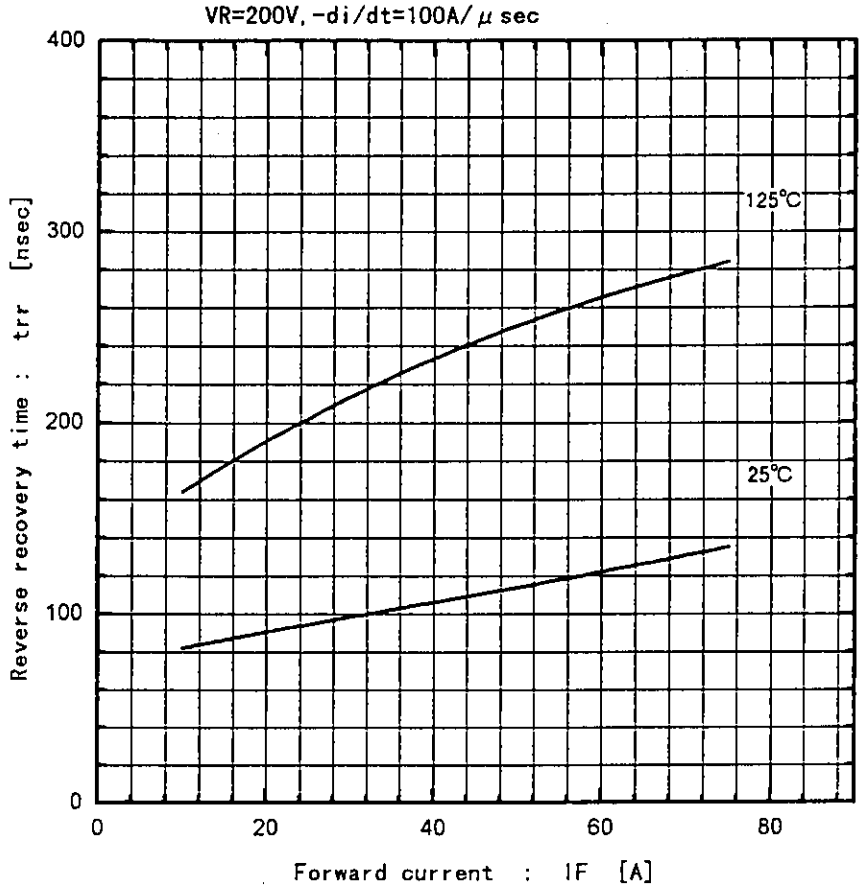
Forward voltage vs. Forward current



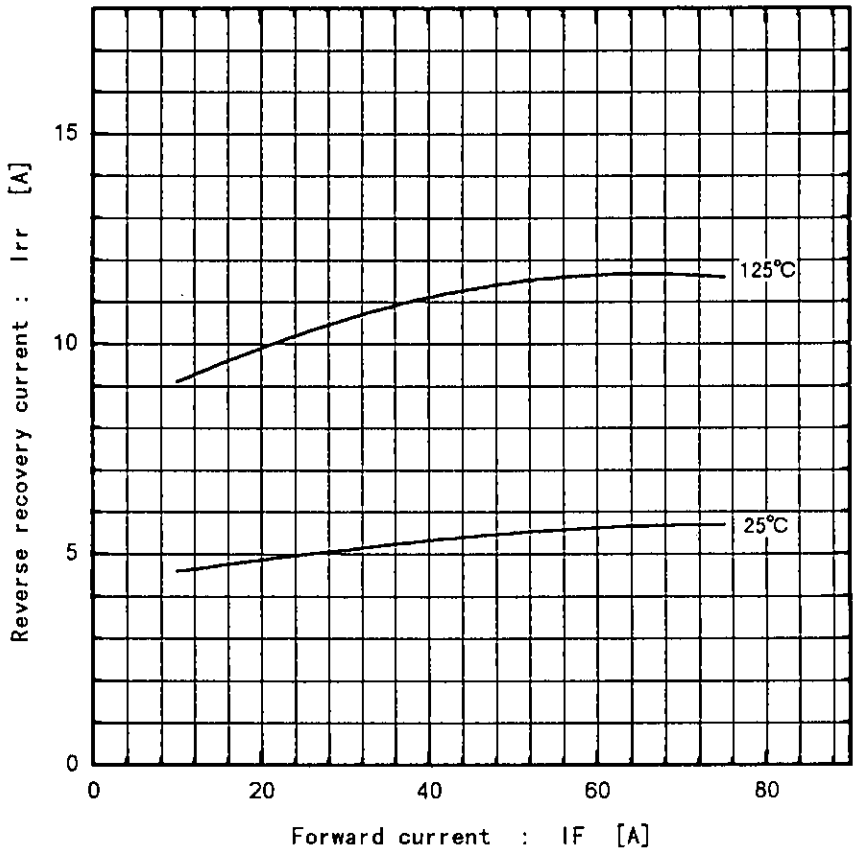
Reverse recovery chracteristics vs. -di/dt
IF=50A, Tj=125°C



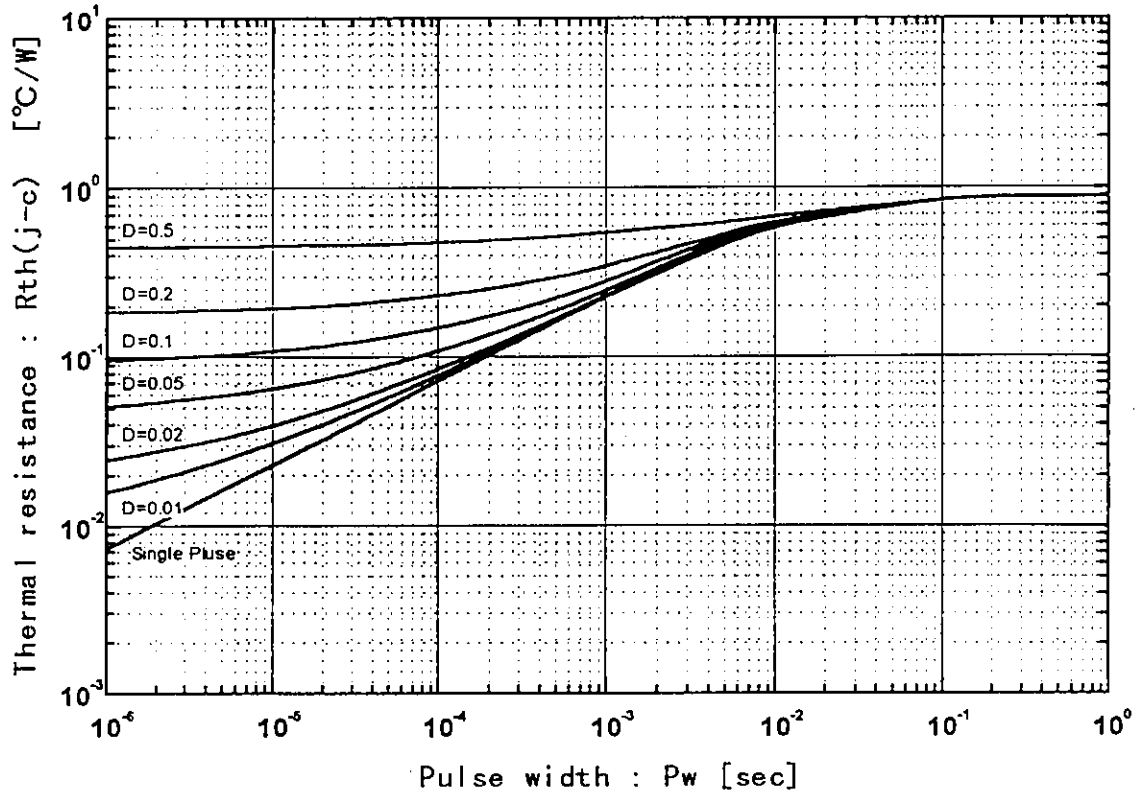
Reverse recovery time vs. Forward current
VR=200V, -di/dt=100A/μsec



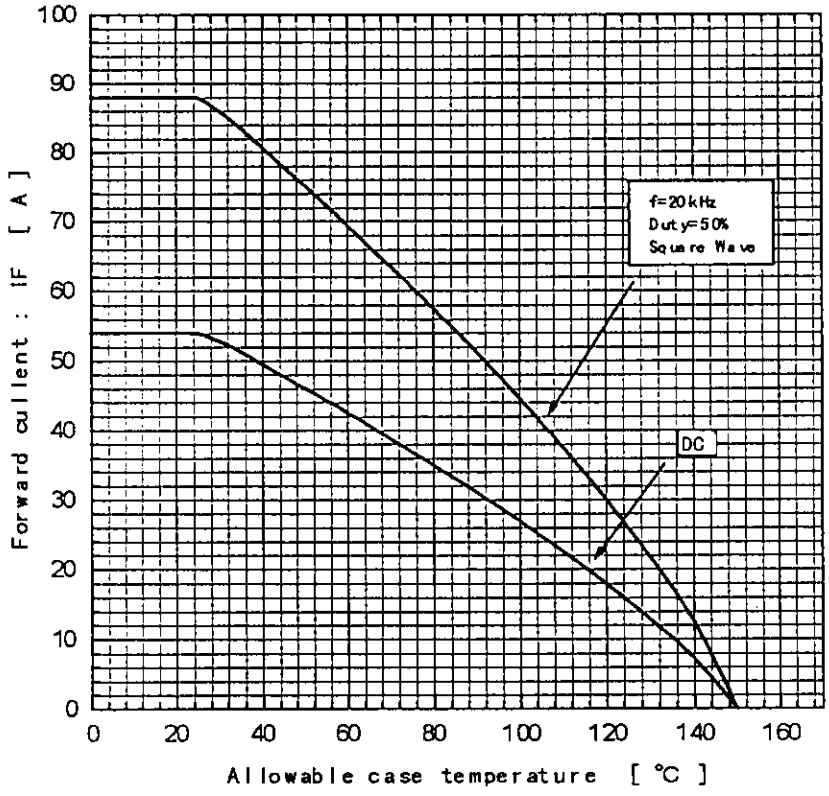
Reverse recovery current vs. Forward current
VR=200V, -di/dt=100A/μsec



ERW13-060 Transient thermal resistance



Forward cullent vs. Max. allowable case temperature



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