SPECIFICATION

DEVICE NAME : SILICON DIODE

TYPE NAME : ERW09-120

SPEC. No. :

DATE :

Fuji Electric Co.,Ltd.

This Specification is subject to change without notice.

	DATE	NAME	APPROVED
DRAWN			
CHECKED			

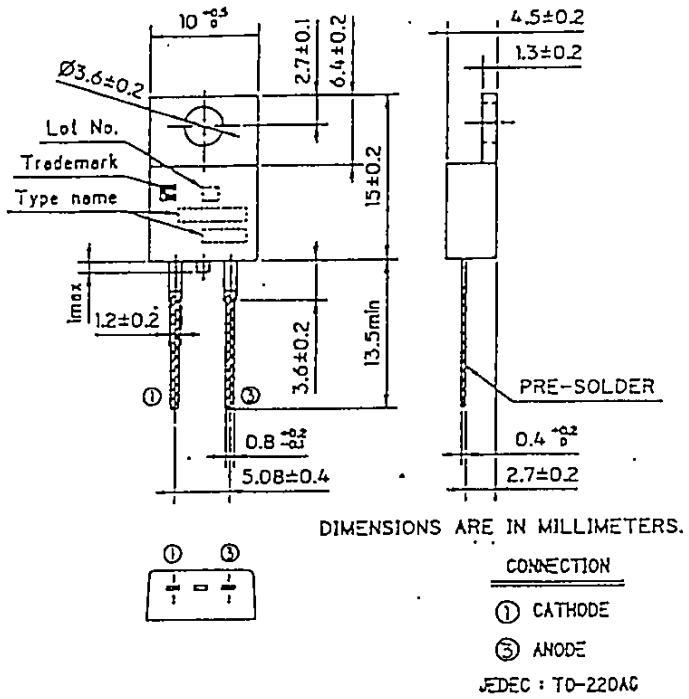
Fuji Electric Co.,Ltd.

DWG.NO.

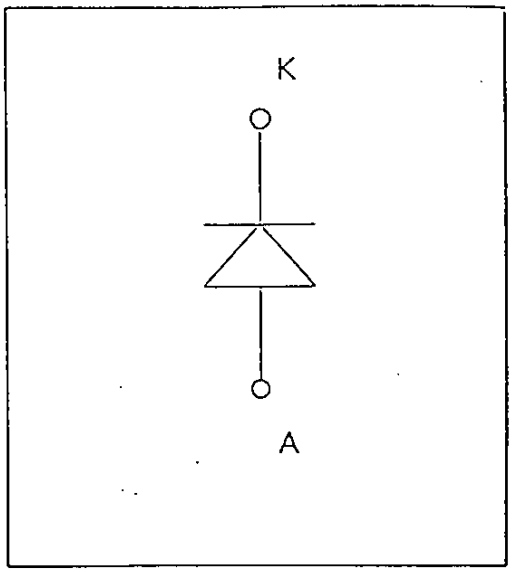
Y 0257-R-004a

ERW09-120

1. Outline Drawing



2. Equivalent circuit



3. Absolute maximum ratings (Tc=25℃)

Items	Symbols	Conditions		Ratings	Units
Repetitive Reverse Voltage	V_{RRM}	———		1200	V
Repetitive peak surge current	I_{FM}	20kHz Duty50% Squ. wave	Tc=124℃	8	A
			Tc= 25℃	26	A
Average rectiffied forward current	$I_{F(AV)}$	D C		8	A
Non-repetitive peak surge current	I_{FSM}	Pulse10ms, sin wave		72	A
Maximam Power Dissipaion	P_D	———		50	W
Operating Temperature	Tj	———		+150	℃
Storage Temperature	Tstg	———		-40 ～+150	℃
Mounting Screw Torque	——	———		50	N・cm

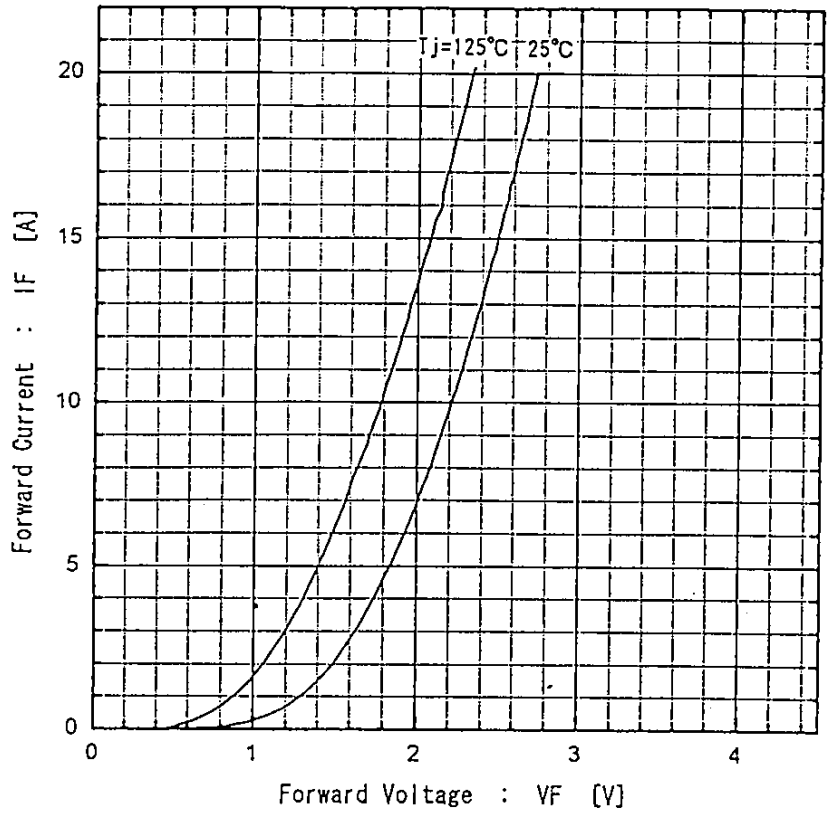
4. Electrical Characteristics (at Tc=25℃ unless otherwise specified)

Items	Symbols	Characteristics			Conditions	Unit
		min.	typ.	max.		
Reverse Current	I_R	——	——	1.0	V_R = 1200V	mA
foward voltage	VF	——	——	3.0	I_F = 8A	V
Reverse recovery time	trr	——	——	0.3	IF= 8A, VR=200V di/dt=100A/μs	μS

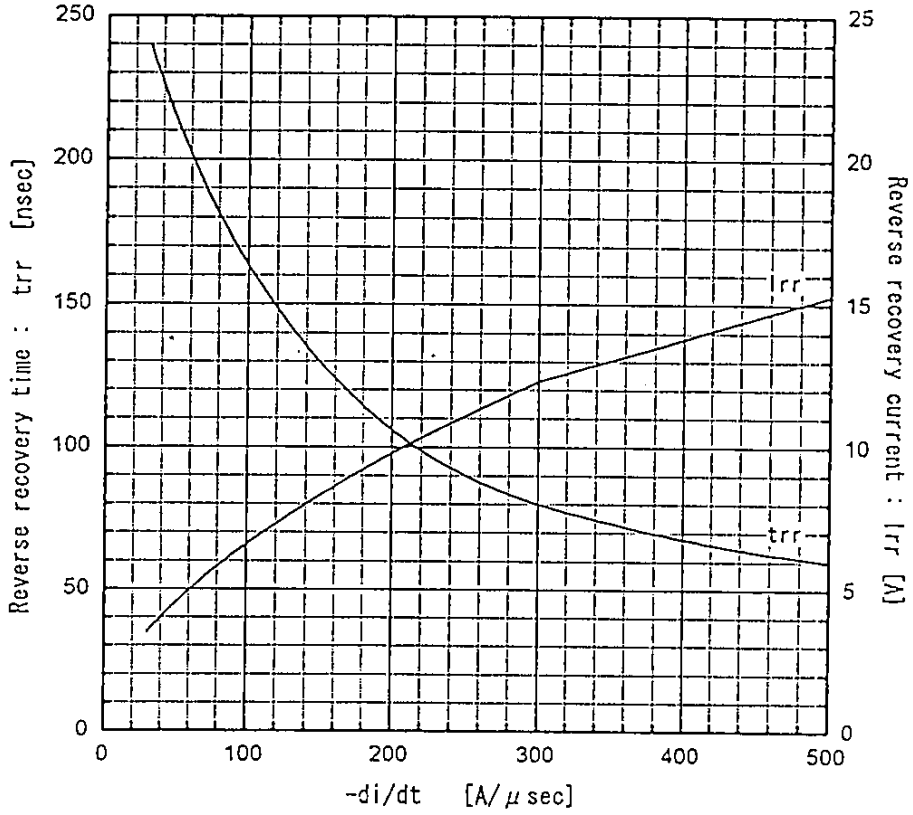
5. Thermal resistance characteristics

Items	Symbols	Characteristics			Conditions	Unit
		min.	typ.	max.		
Thermal resistance	Rth(j-c)	——	——	2.50	junction to case	℃/W

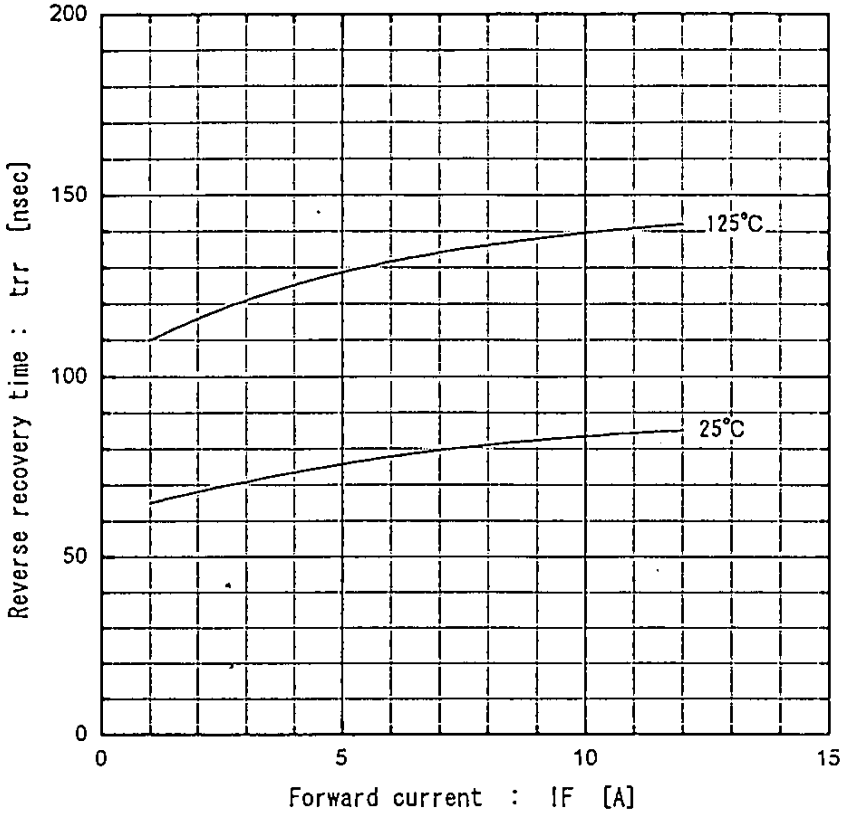
Forward voltage- vs. Forward current



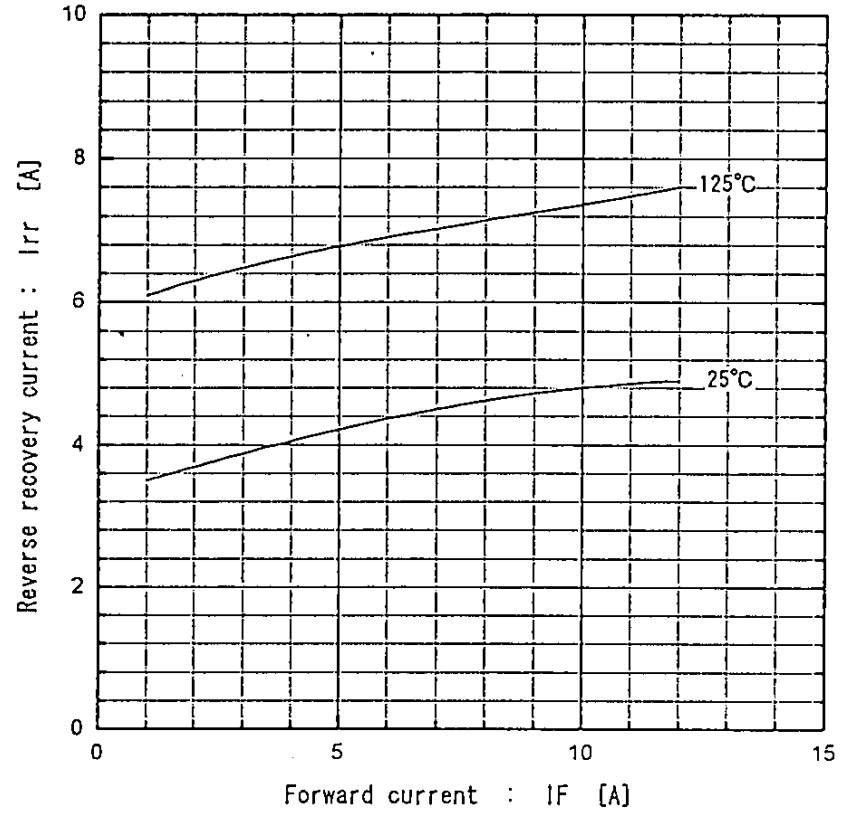
Reverse recovery chracteristics vs. -di/dt
IF=8A, Tj=125°C



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



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



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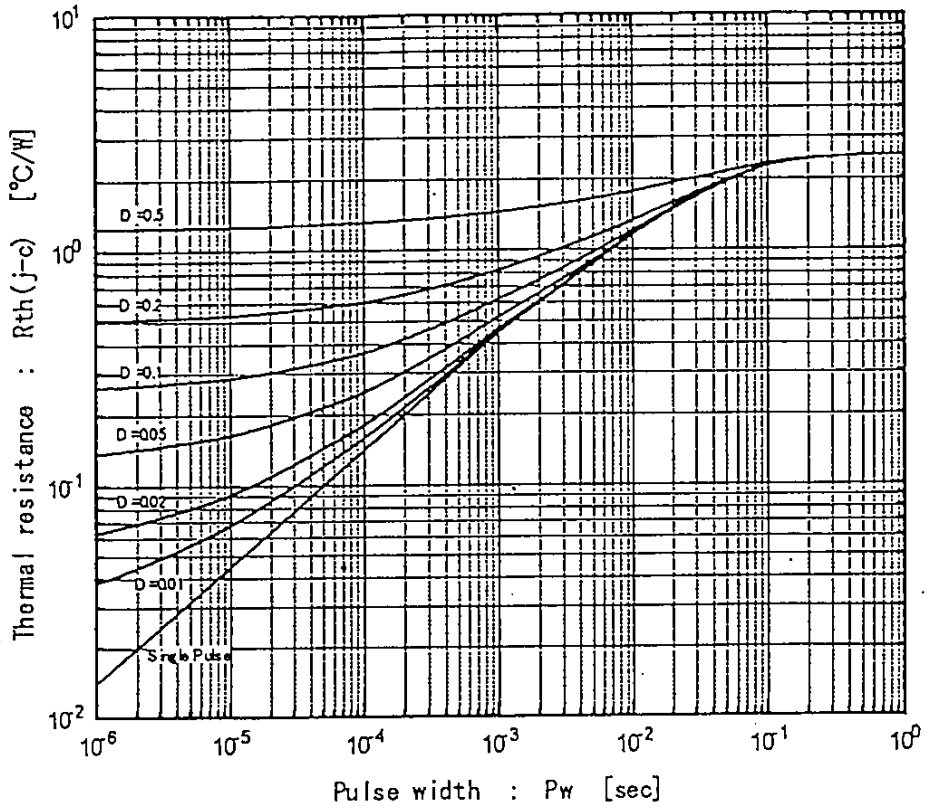
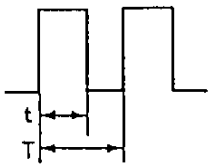
Transient thermal resistance





Forward cullent vs. Max. allowable case temperature