

SPECIFICATION

DEVICE NAME : SILICON DIODE

TYPE NAME : ERW04-060

SPEC. No. : - - - -

DATE : - - - -

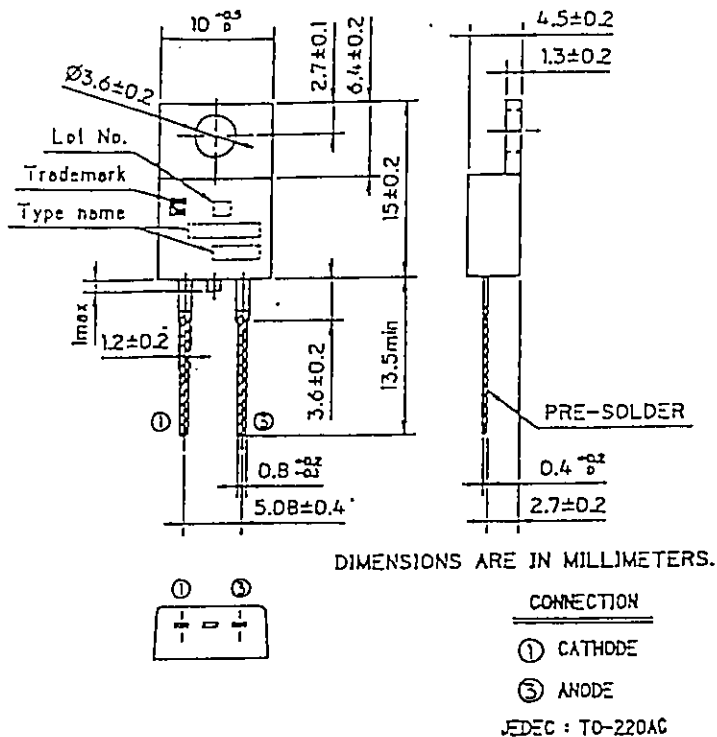
Fuji Electric Co.,Ltd.

This Specification is subject to change without notice.

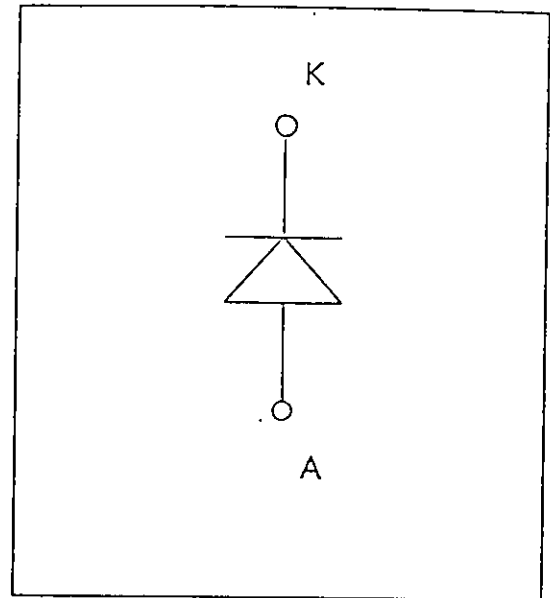
	DATE	NAME	APPROVED		Fuji Electric Co.,Ltd.	
DRAWN	- - -				DWG.NO.	1/6
CHECKED						

ERW04-060

1. Outline Drawing



2. Equivalent circuit

3. Absolute maximum ratings ($T_c=25^\circ\text{C}$)

Items	Symbols	Conditions	Ratings	Units
Repetitive Reverse Voltage	V_{RRM}	_____	600	V
Repetitive peak surge current	I_{FM}	20kHz Duty50% Squ. wave	$T_c= 91^\circ\text{C}$ 20	A
			$T_c= 25^\circ\text{C}$ 35	A
Average rectified forward current	$I_{F(AV)}$	D C	20	A
Non-repetitive peak surge current	I_{FSM}	Pulse10ms, sin wave	90	A
Maximam Power Dissipaion	P_D	_____	55	W
Operating Temperature	T_j	_____	+150	$^\circ\text{C}$
Storage Temperature	T_{stg}	_____	-40 ~ +150	$^\circ\text{C}$
Mounting Screw Torque	_____	_____	50	N · cm

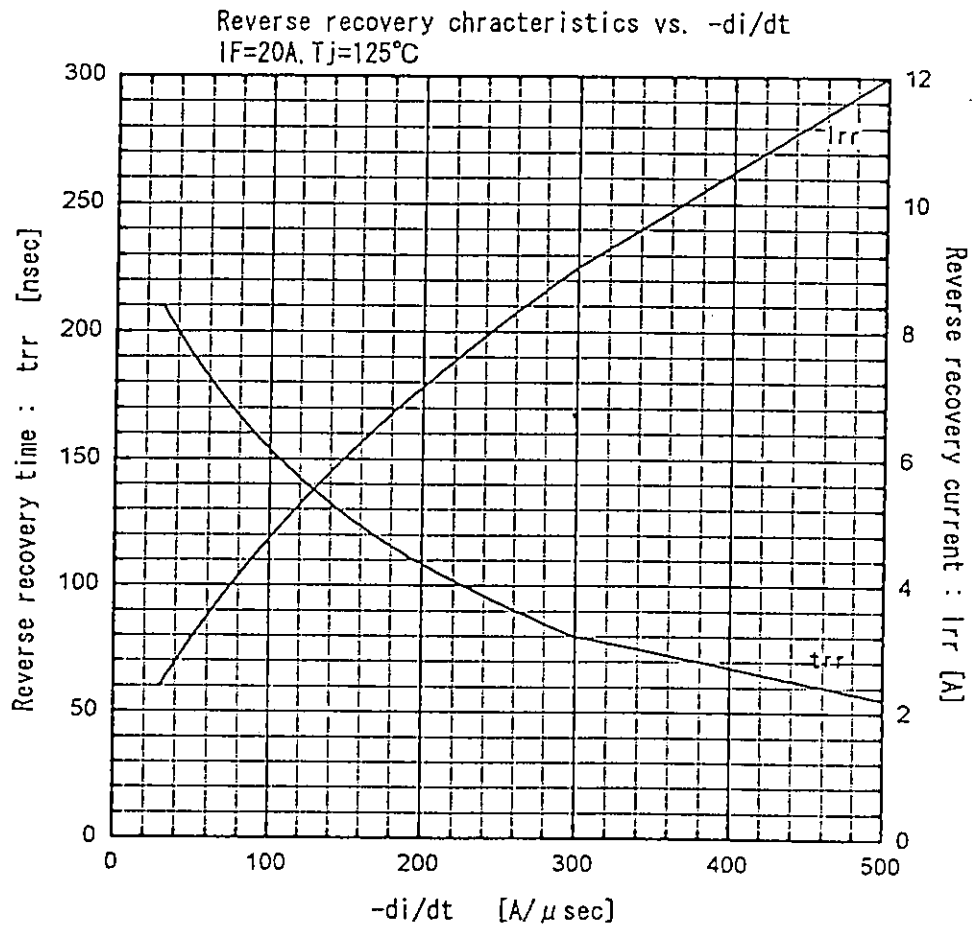
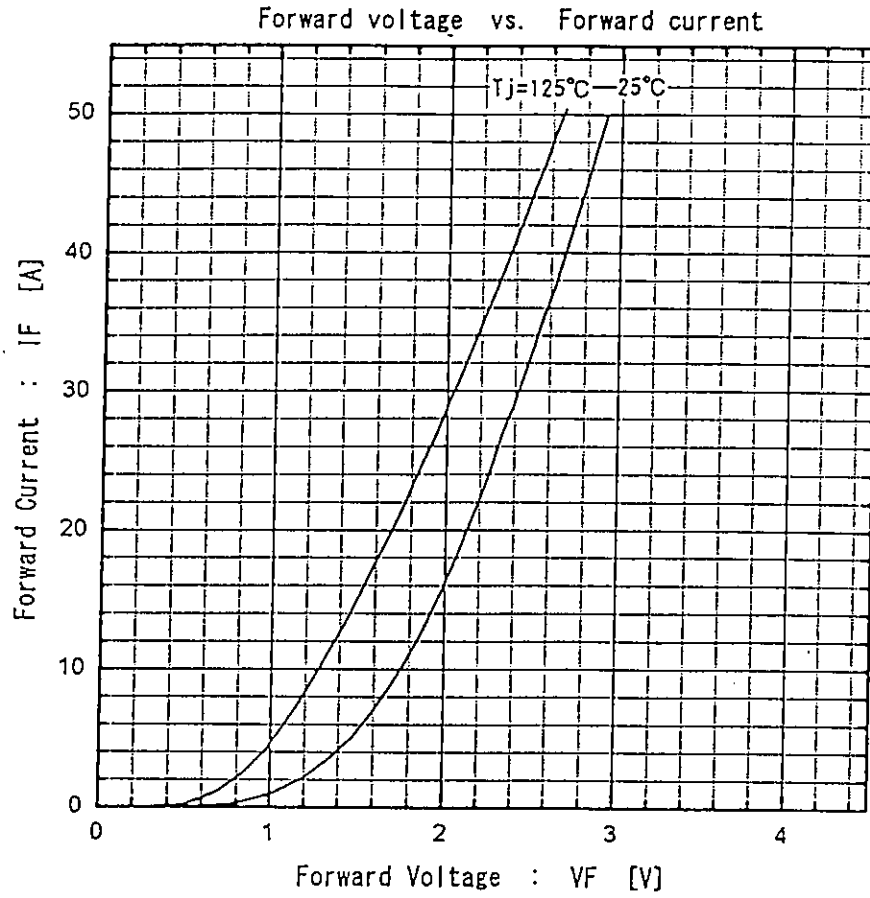
4. Electrical Characteristics (at $T_c=25^{\circ}\text{C}$ unless otherwise specified)

Items	Symbols	Characteristics			Conditions	Unit
		min.	typ.	max.		
Reverse Current	I_R	—	—	1.0	$V_R = 600 \text{ V}$	mA
forward voltage	V_F	—	—	3.0	$I_F = 20\text{A}$	V
Reverse recovery time	t_{rr}	—	—	0.3	$I_F = 20\text{A}, V_R = 200\text{V}$ $di/dt = 100\text{A}/\mu\text{s}$	μs

5. Thermal resistance characteristics

Items	Symbols	Characteristics			Conditions	Unit
		min.	typ.	max.		
Thermal resistance	$R_{th(j-c)}$	—	—	2.27	junction to case	$^{\circ}\text{C}/\text{W}$

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DWG. NO.

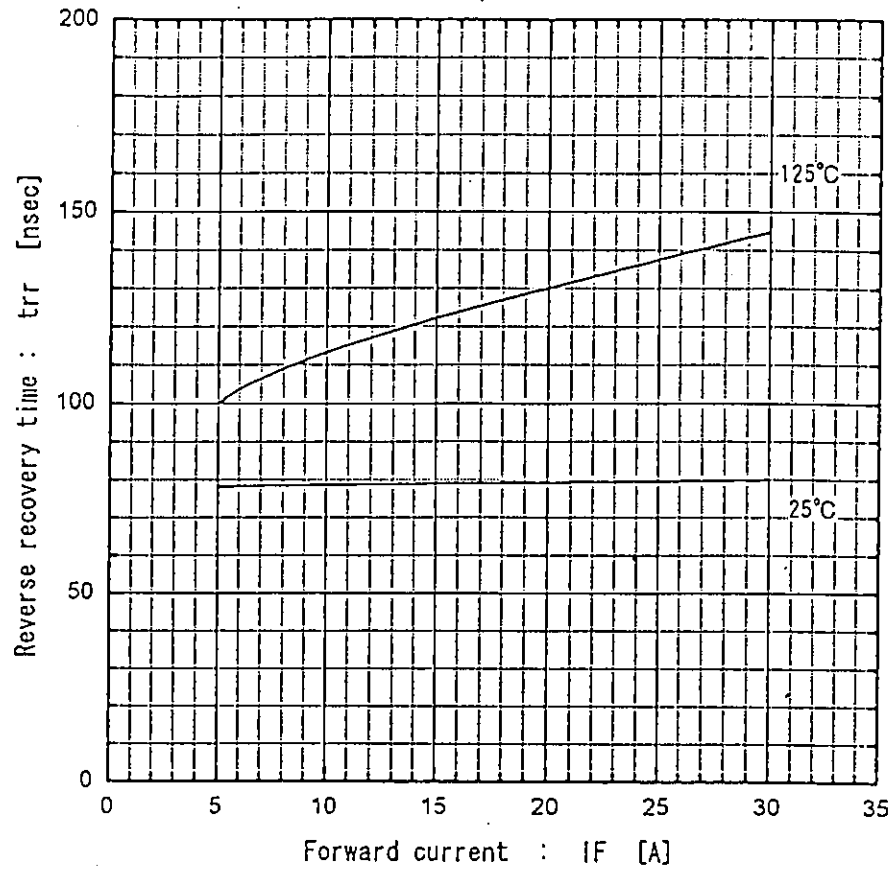
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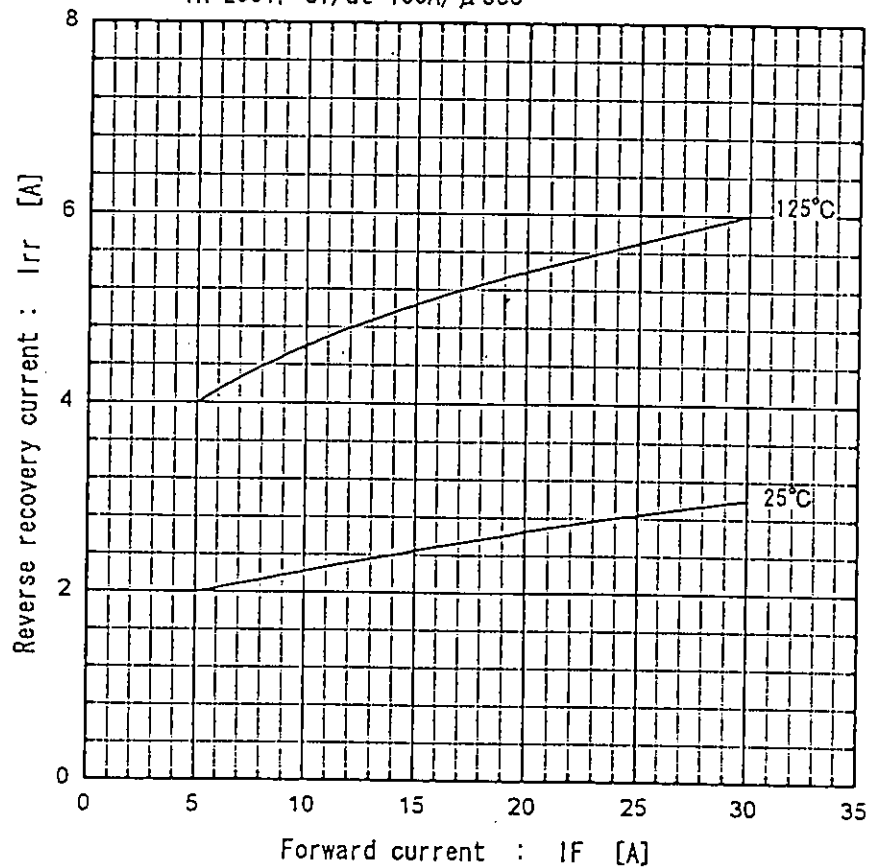
H04-004-03

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



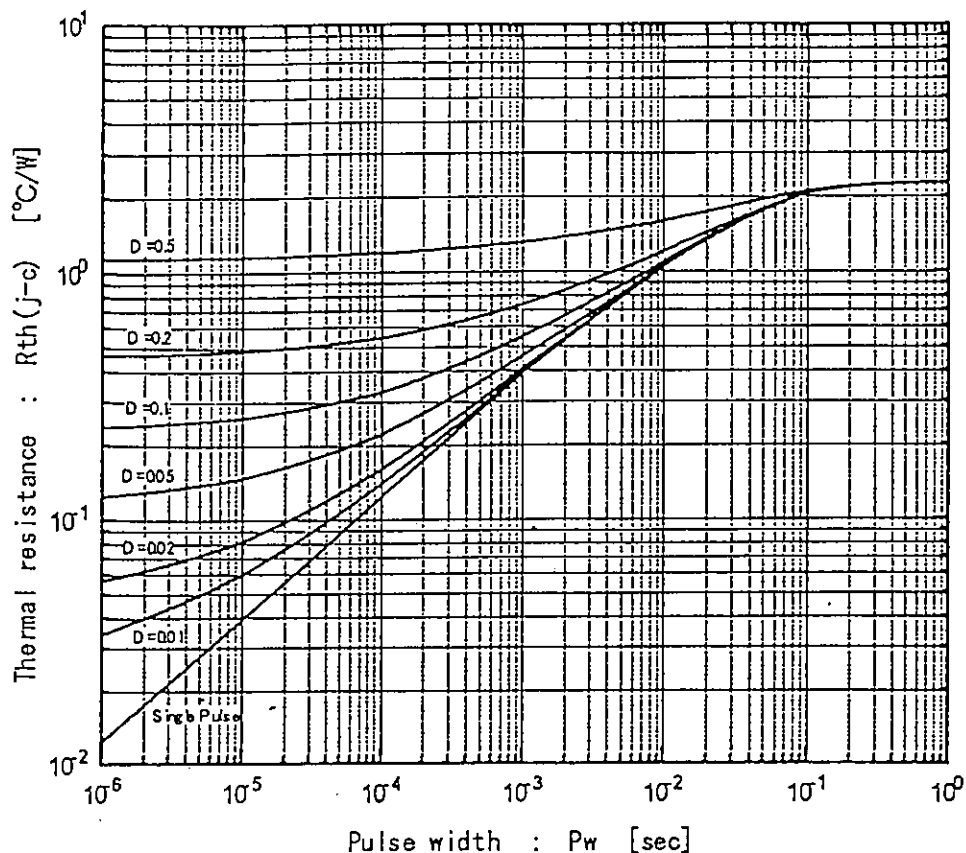
Reverse recovery current vs. Forward current
VR=200V, $-di/dt=100A/\mu sec$



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Transient thermal resistance



Forward current vs. Max. allowable case temperature

