

SPECIFICATION

DEVICE NAME : SILICON DIODE

TYPE NAME : ERW02-060

SPEC. No. :

DATE :

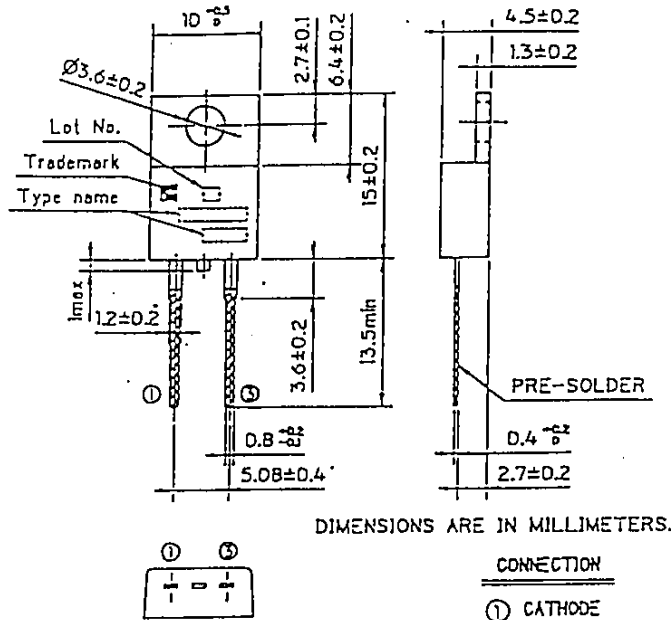
Fuji Electric Co.,Ltd.

This Specification is subject to change without notice.

	DATE	NAME	APPROVED	Fuji Electric Co.,Ltd.	
DRAWN				DWG.NO.	A
CHECKED					
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ERW02-060

1. Outline Drawing

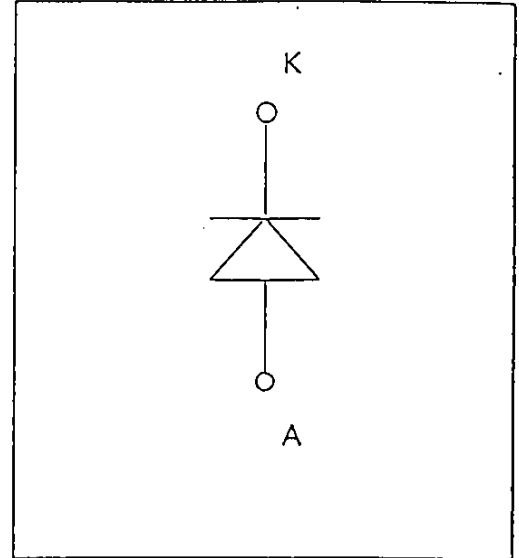


CONNECTION

① CATHODE
② ANODE

JEDEC : TO-220AG

2. Equivalent circuit



3. Absolute maximum ratings (Tc=25°C)

Items	Symbols	Conditions	Ratings	Units
Repetitive Reverse Voltage	V_{RRM}	—————	600	V
Repetitive peak surge current	I_{FM}	20kHz Duty50% Squ. wave	Tc=100°C 10	A
			Tc= 25°C 19	A
Average rectified forward current	$I_{F(AV)}$	DC	10	A
Non-repetitive peak surge current	I_{FSM}	Pulse10ms, sin wave	63	A
Maximam Power Dissipaion	P_D	—————	35	W
Operating Temperature	T_j	—————	+150	°C
Storage Temperature	T_{stg}	—————	-40 ~+150	°C
Mounting Screw Torque	—	—————	50	N · cm

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

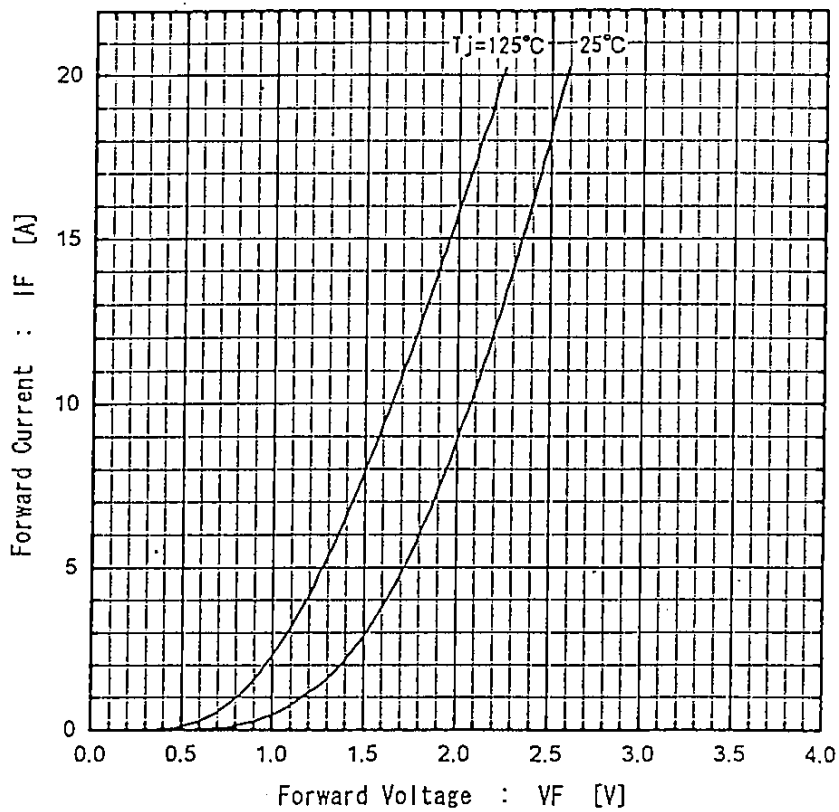
Items	Symbols	Characteristics			Conditions	Unit
		min.	typ.	max.		
Reverse Current	I_R	—	—	1.0	$V_R = 600 \text{ V}$	mA
forward voltage	VF	—	—	3.0	$I_F = 10 \text{ A}$	V
Reverse recovery time	t _{rr}	—	—	0.3	$I_F = 10 \text{ A}, V_R = 200 \text{ V}$ $di/dt = 100 \text{ A}/\mu\text{s}$	μs

5. Thermal resistance characteristics

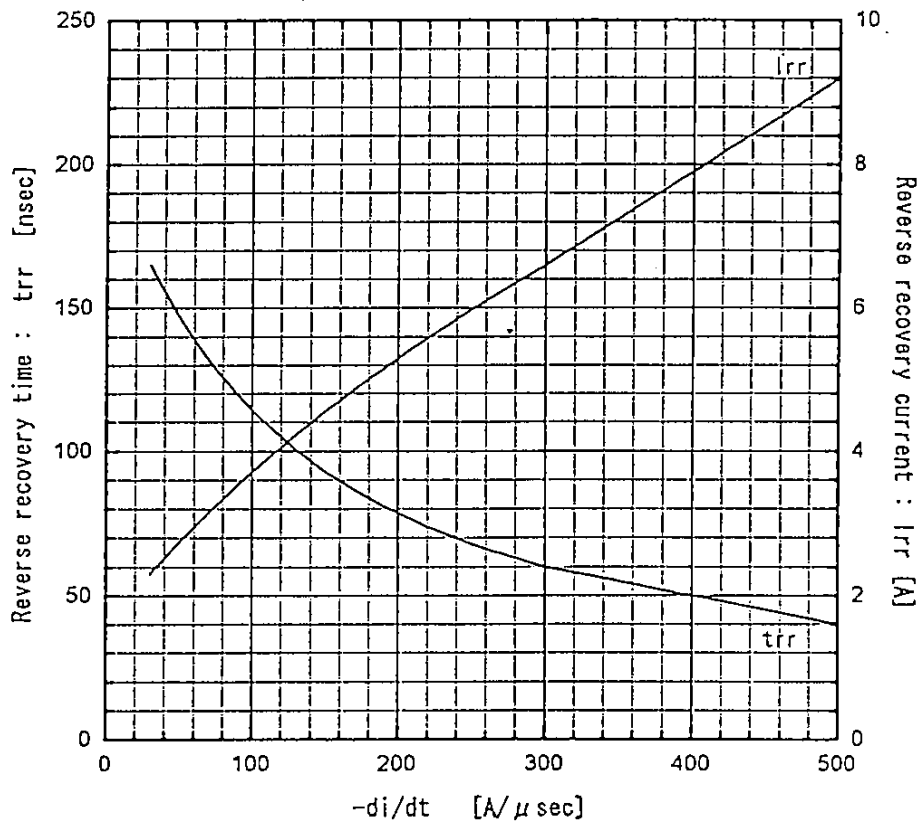
Items	Symbols	Characteristics			Conditions	Unit
		min.	typ.	max.		
Thermal resistance	R _{th(j-c)}	—	—	3.57	junction to case	°C/W

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Forward voltage vs. Forward current



Reverse recovery characteristics vs. $-di/dt$
IF=10A, Tj=125°C



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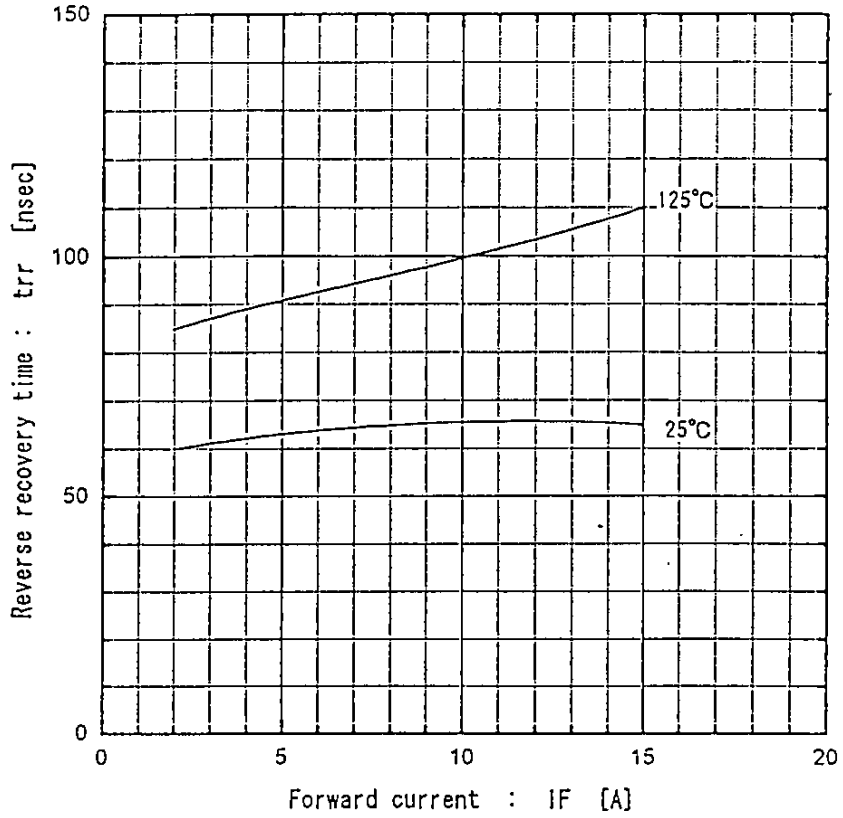
DWG. NO.

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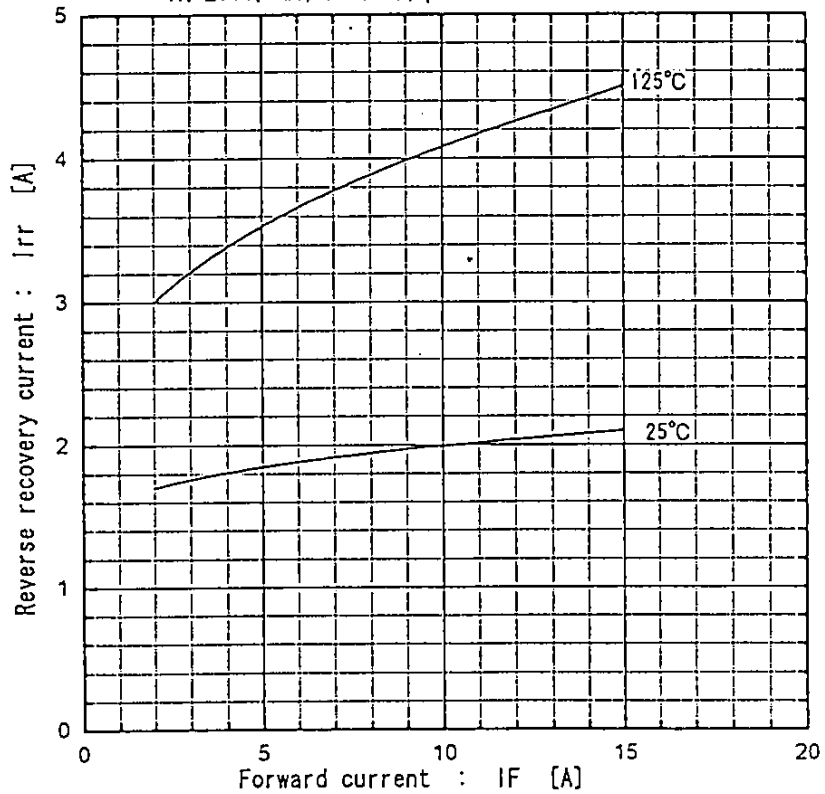
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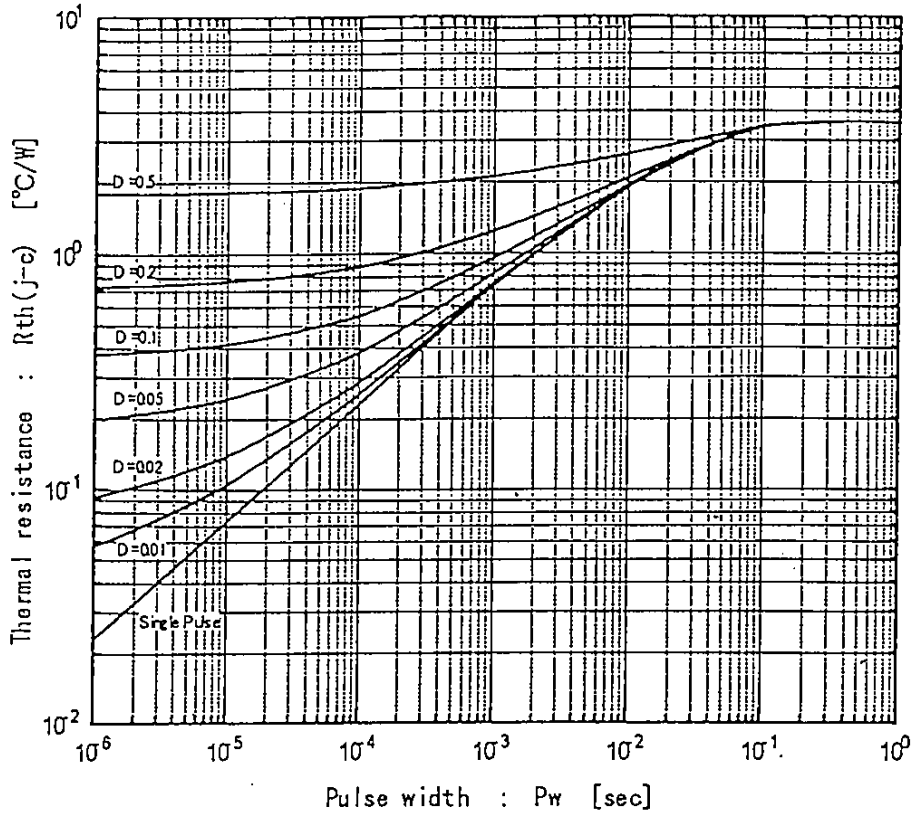
Reverse recovery time vs. Forward current
 $VR=200V, -di/dt=100A/\mu sec$



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



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Transient thermal resistance



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Forward current vs. Max. allowable case temperature

