

# SPECIFICATION

DEVICE NAME : SILICON DIODE

TYPE NAME : ERW01-060

SPEC. No. :

DATE :

Fuji Electric Co.,Ltd.

This Specification is subject to change without notice.

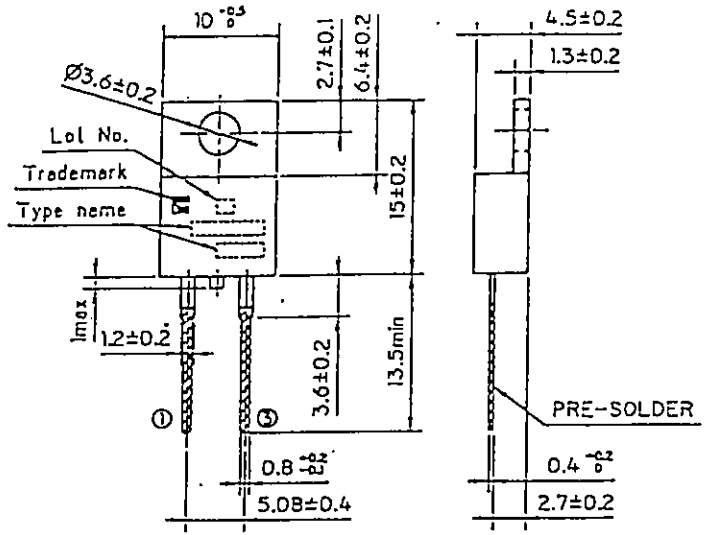
DATE	NAME	APPROVED
DRAWN		

Fuji Electric Co.,Ltd.



ERW01-060

1. Outline Drawing



DIMENSIONS ARE IN MILLIMETERS.

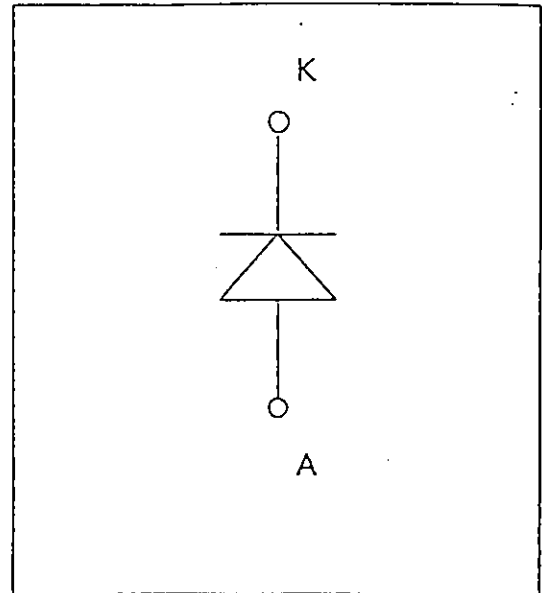


CONNECTION

- ① CATHODE
- ③ 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=118°C 5	A
			Tc= 25°C 13	A
Average rectified forward current	$I_{F(AV)}$	DC	5	A
Non-repetitive peak surge current	$I_{FSM}$	Pulse10ms, sin wave	40	A
Maximam Power Dissipaion	$P_D$	—————	25	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 )

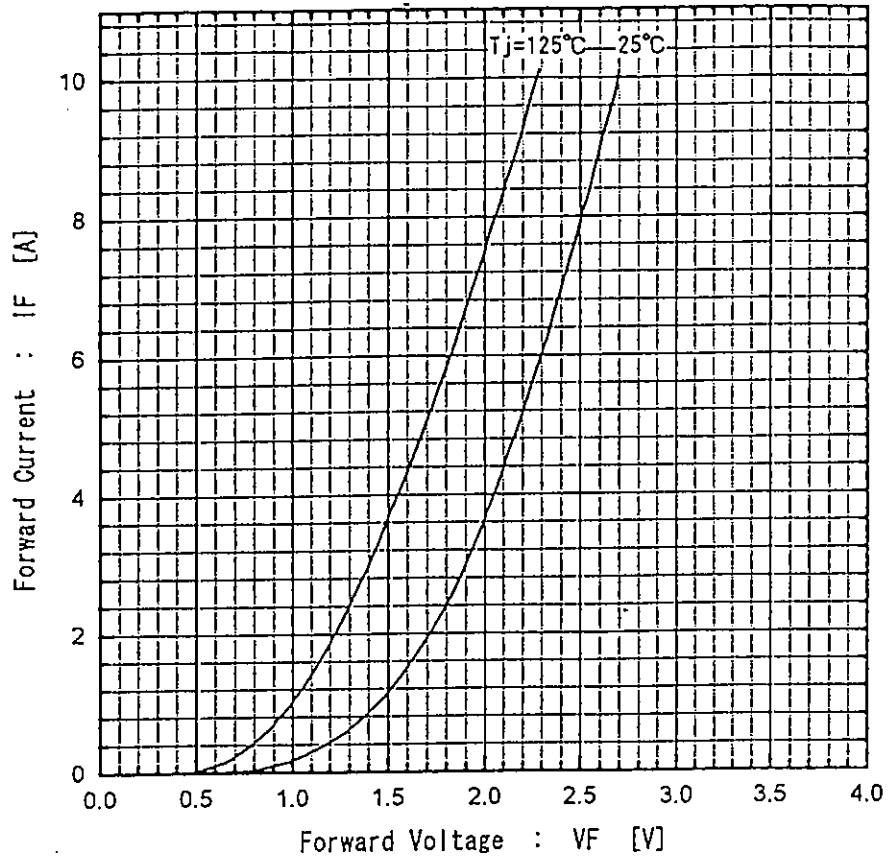
Items	Symbols	Characteristics			Conditions	Unit
		min.	typ.	max.		
Reverse Current	$I_R$	—	—	1.0	$V_R = 600 \text{ V}$	mA
forward voltage	VF	—	—	3.0	$I_F = 5 \text{ A}$	V
Reverse recovery time	trr	—	—	0.3	$I_F = 5 \text{ A}, V_R = 200 \text{ V}$ $di/dt = 100 \text{ A}/\mu\text{s}$	$\mu\text{s}$

5. Thermal resistance characteristics

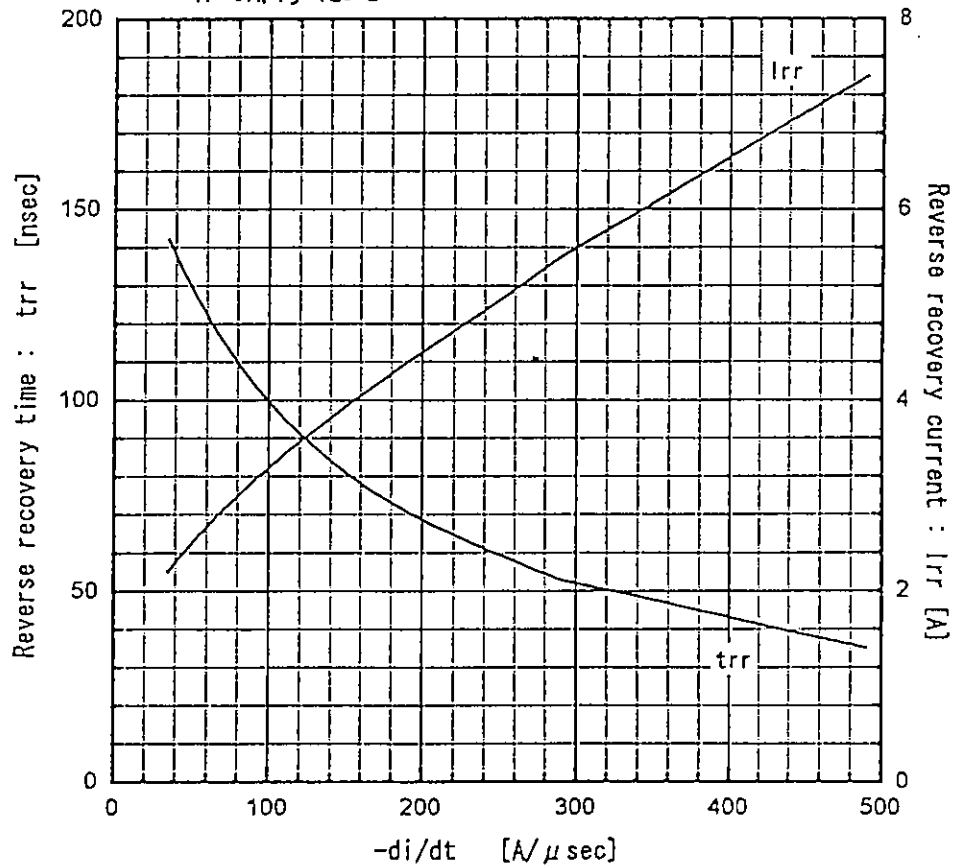
Items	Symbols	Characteristics			Conditions	Unit
		min.	typ.	max.		
Thermal resistance	Rth(j-c)	—	—	5.00	junction to case	$^{\circ}\text{C}/\text{W}$

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Forward voltage vs. Forward current

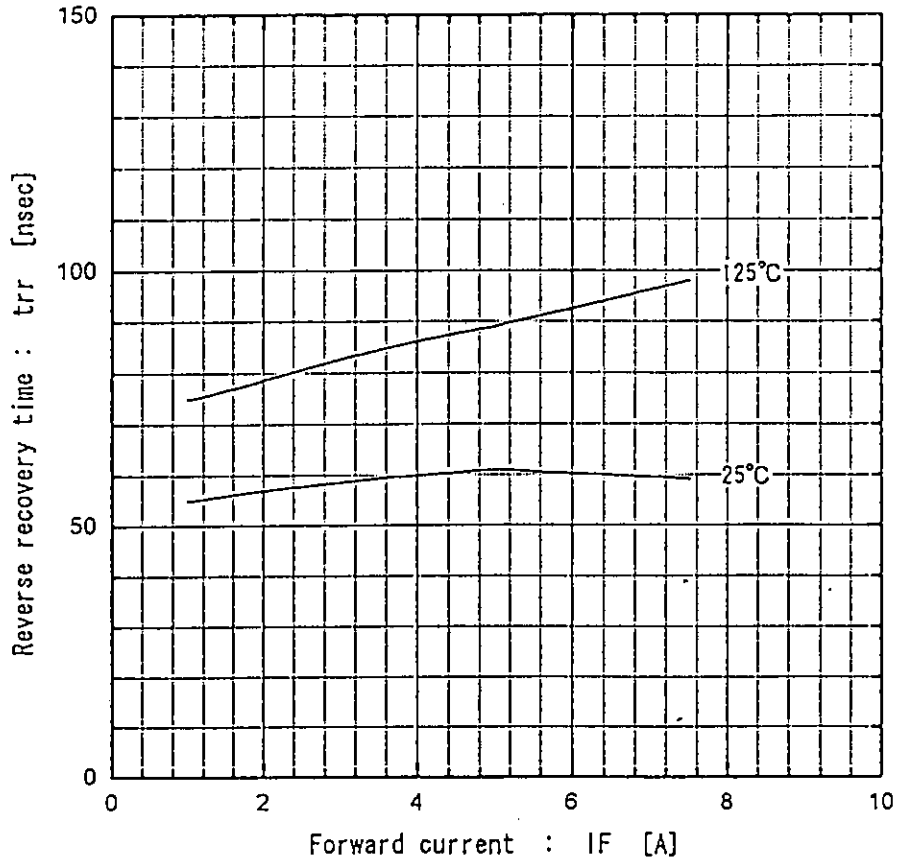


Reverse recovery characteristics vs.  $-di/dt$   
IF=5A, Tj=125°C

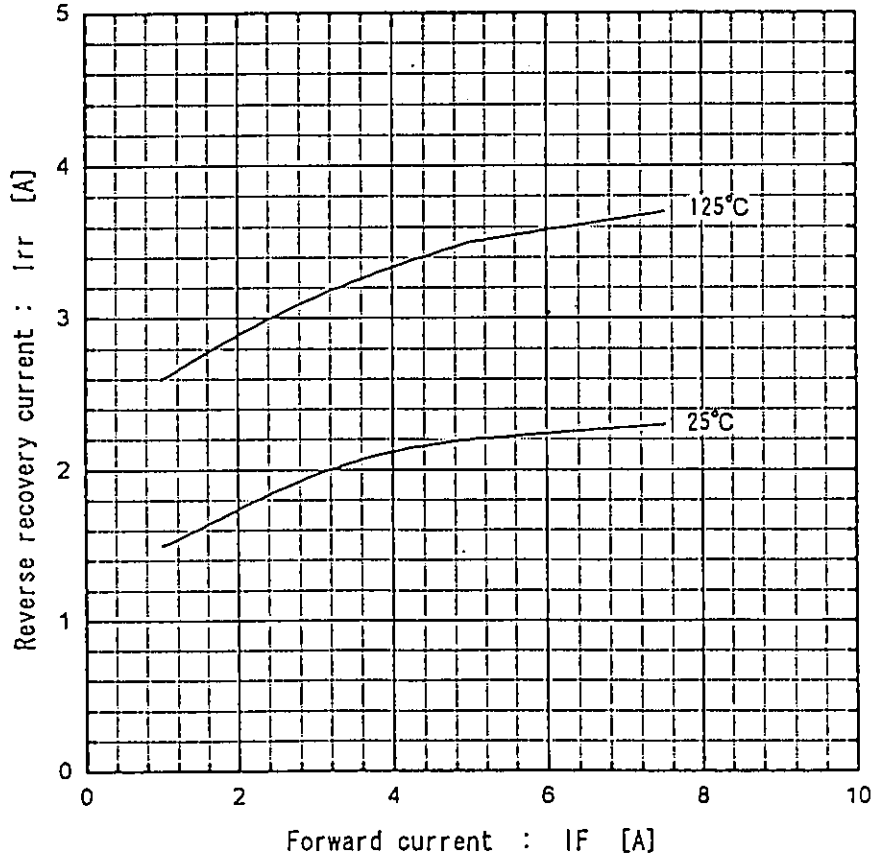


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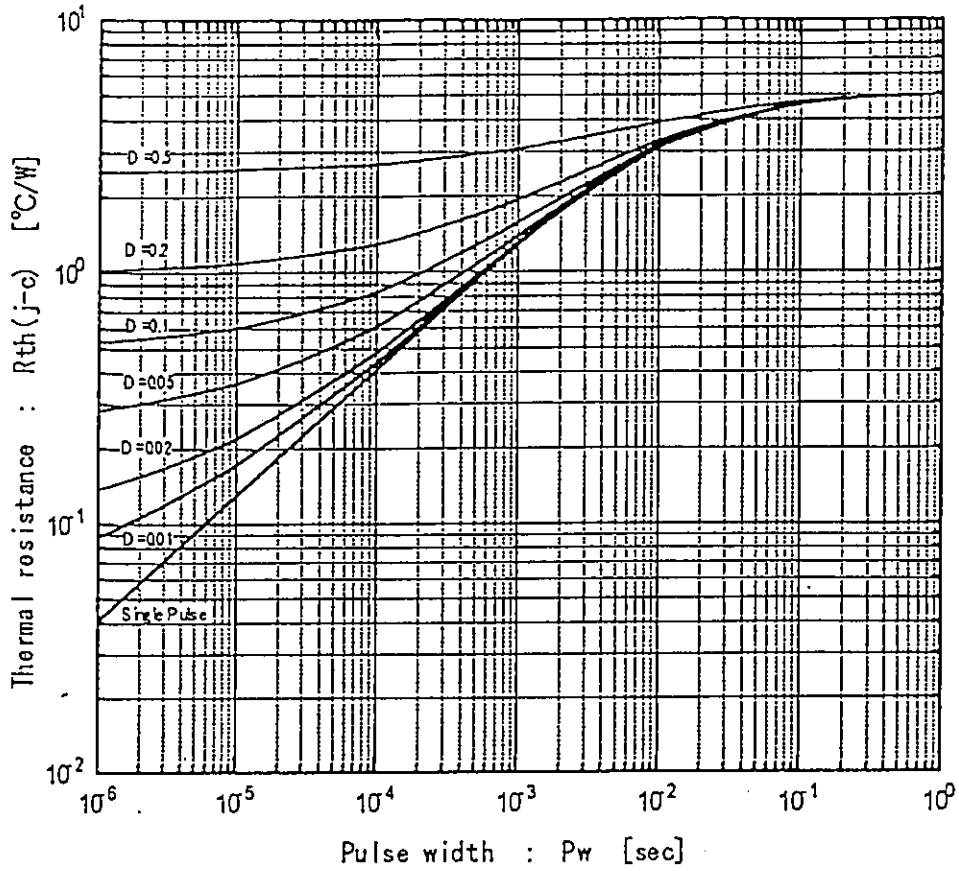
Reverse recovery time vs. Forward current  
VR=200V, -di/dt=100A/ $\mu$ sec



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

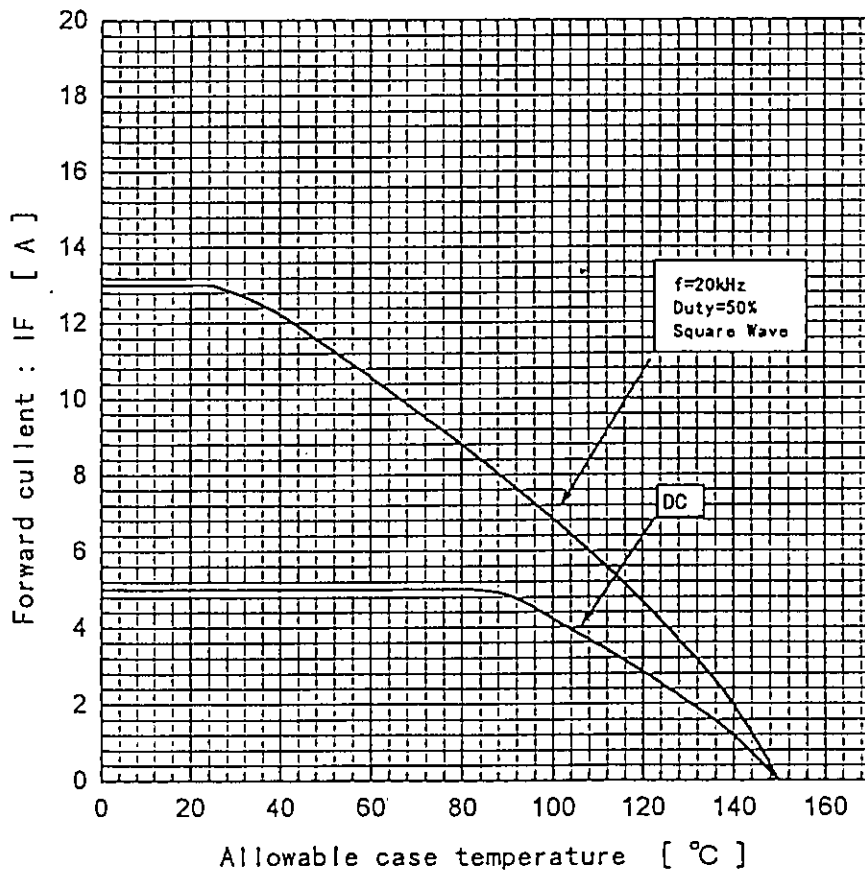


ERW01-060  
Transient thermal resistance



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Forward current vs. Max. allowable case temperature



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