

SPECIFICATION

DEVICE NAME : SILICON DIODE

TYPE NAME : ERW01-060

SPEC. No. :

DATE :

Fuji Electric Co.,Ltd.

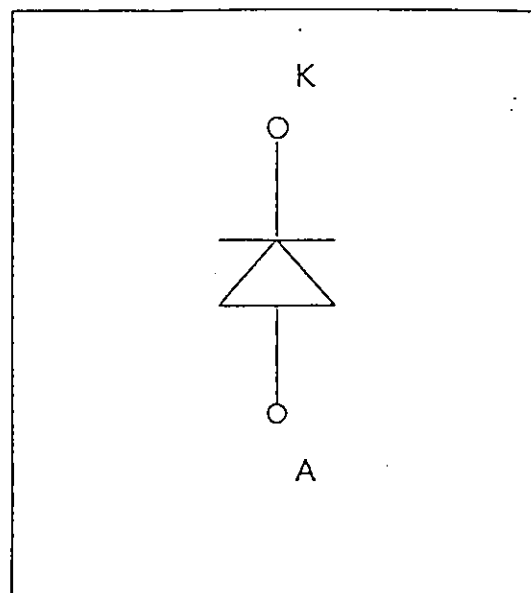
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	DATE	NAME	APPROVED
DRAWN			
CHECKED	- -		

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1/6

2. Equivalent circuit



Items	Symbols	Conditions		Ratings	Units
Repetitive Reverse Voltage	V_{RRM}	—————		600	V
Repetitive peak surge current	I_{FM}	20kHz Duty50% Squ. wave	$T_c=118^{\circ}\text{C}$	5	A
			$T_c=25^{\circ}\text{C}$	13	A
Average rectified forward current	$I_F(AV)$	D C		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	$^{\circ}\text{C}$
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)

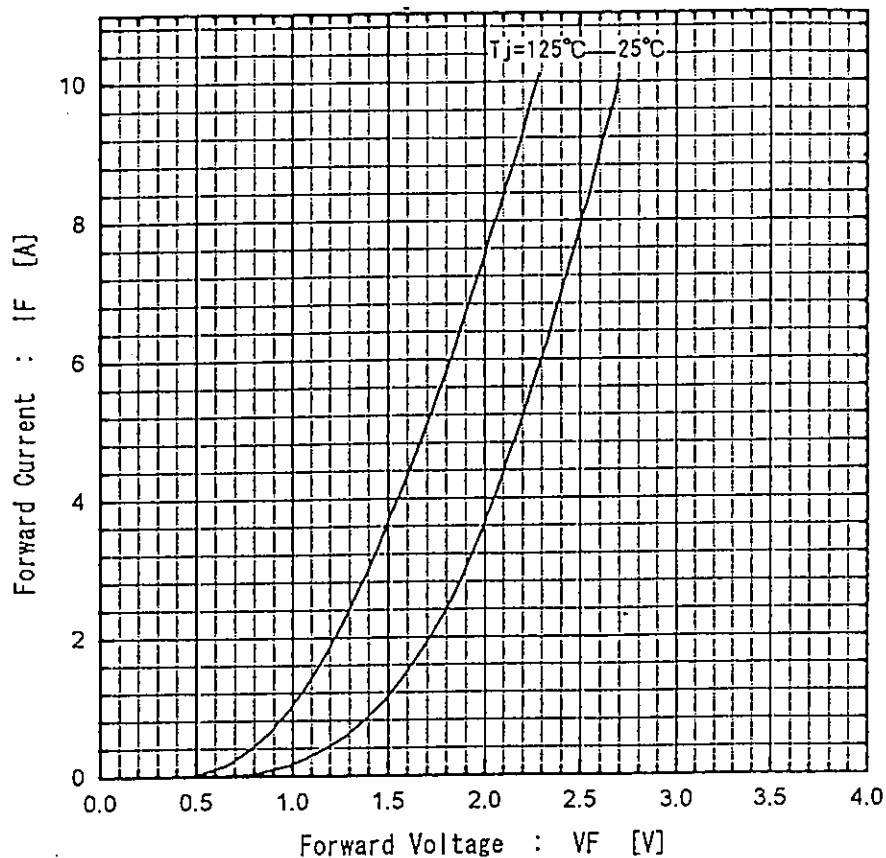
Items	Symbols	Characteristics			Conditions	Unit
		min.	typ.	max.		
Reverse Current	I_R	—	—	1.0	$V_R = 600 \text{ V}$	mA
foward voltage	V_F	—	—	3.0	$I_F = 5 \text{ A}$	V
Reverse recovery time	t_{rr}	—	—	0.3	$I_F = 5 \text{ A}, V_R = 200 \text{ V}$ $di/dt = 100 \text{ A}/\mu\text{s}$	μs

5. Thermal resistance characteristics

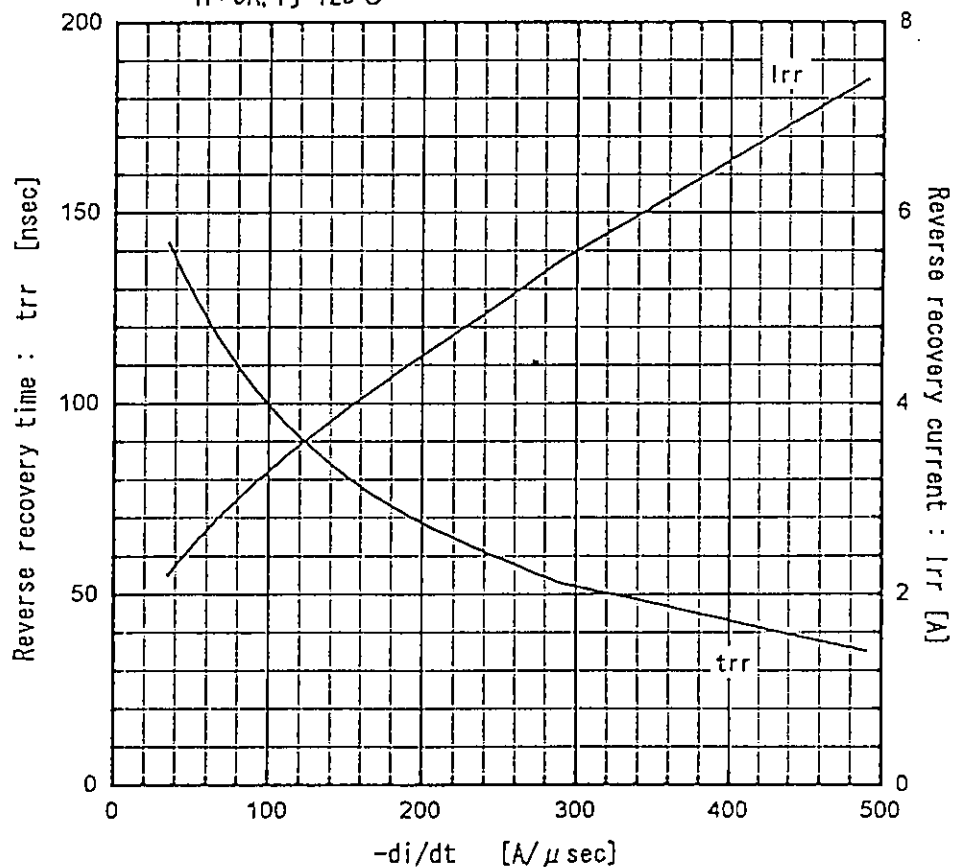
Items	Symbols	Characteristics			Conditions	Unit
		min.	typ.	max.		
Thermal resistance	$R_{th(j-c)}$	—	—	5.00	junction to case	$^{\circ}\text{C}/\text{W}$

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Forward voltage vs. Forward current



Reverse recovery characteristics vs. $-di/dt$
 $I_F = 5\text{A}$, $T_j = 125^\circ\text{C}$



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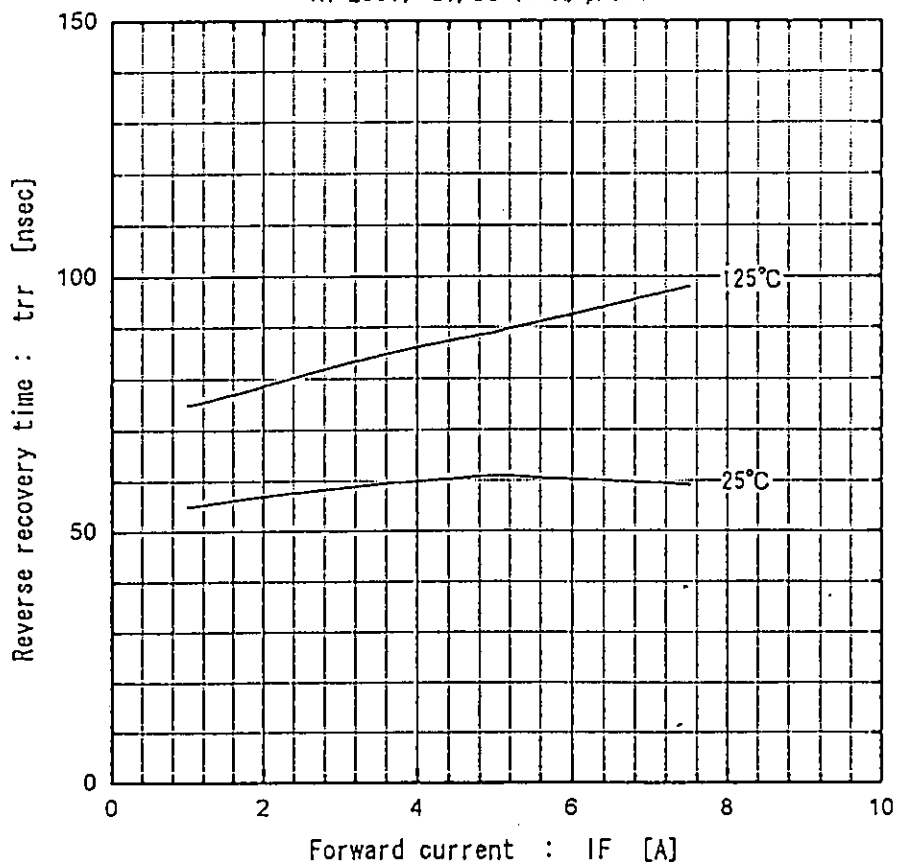
4/6

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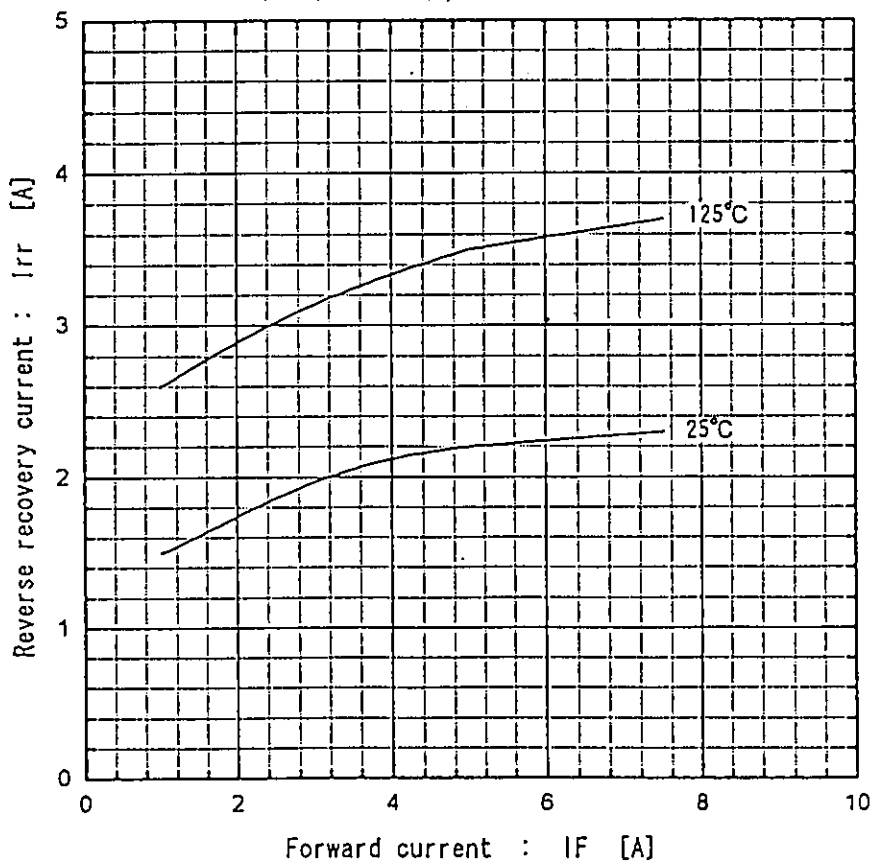
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Reverse recovery time vs. Forward current
 $V_R=200V, -di/dt=100A/\mu sec$



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



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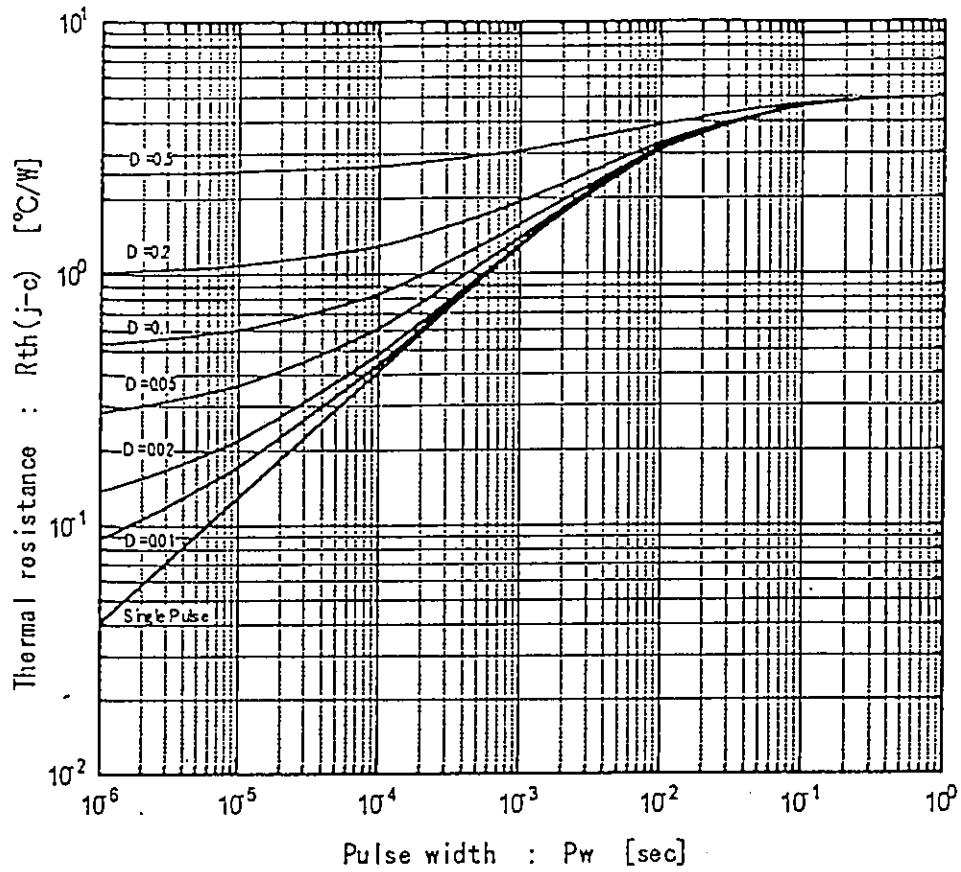
5/6

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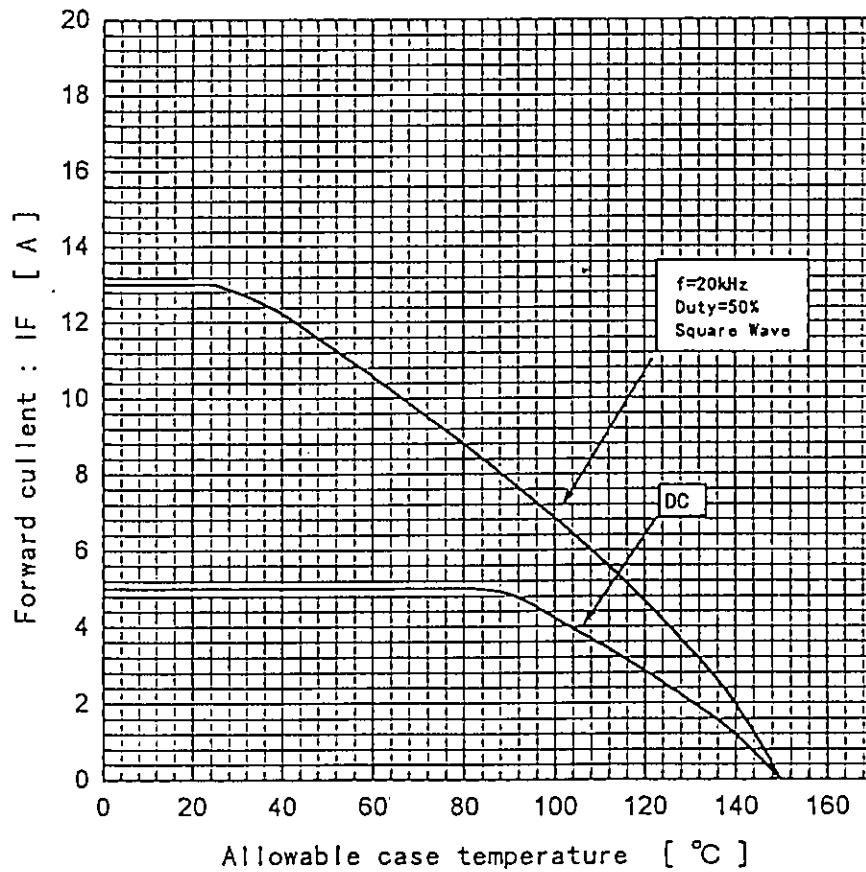
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Transient thermal resistance



Forward current vs. Max. allowable case temperature



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