

SPECIFICATION

DEVICE NAME : SILICON DIODE
TYPE NAME : ERW01-060
SPEC. No. : - - - -
DATE : - - - - -

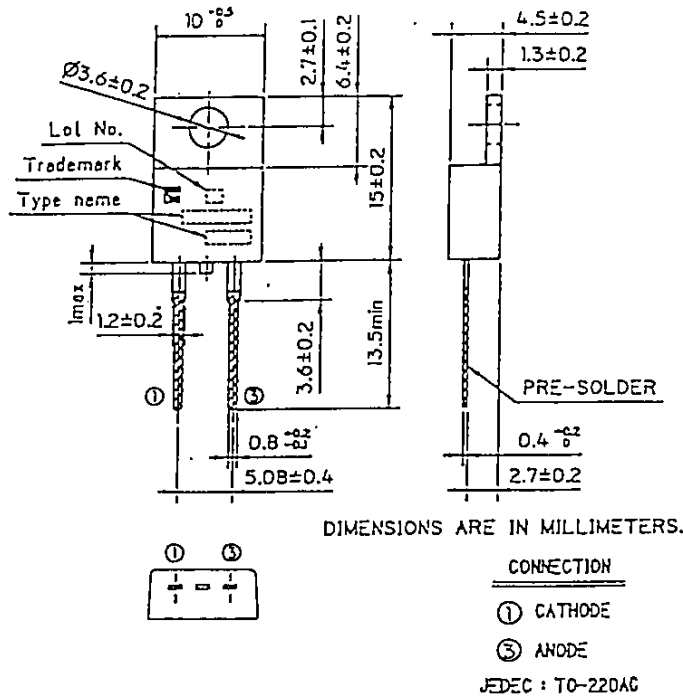
Fuji Electric Co.,Ltd.

This Specification is subject to change without notice.

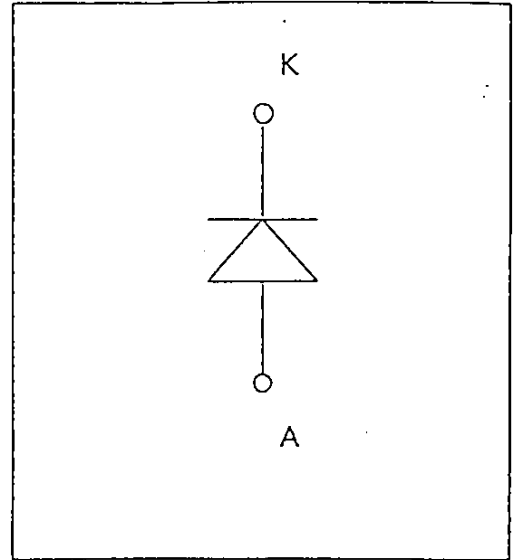
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CHECKED	-	-	-		1/6

ERW01-060

1. Outline Drawing



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)

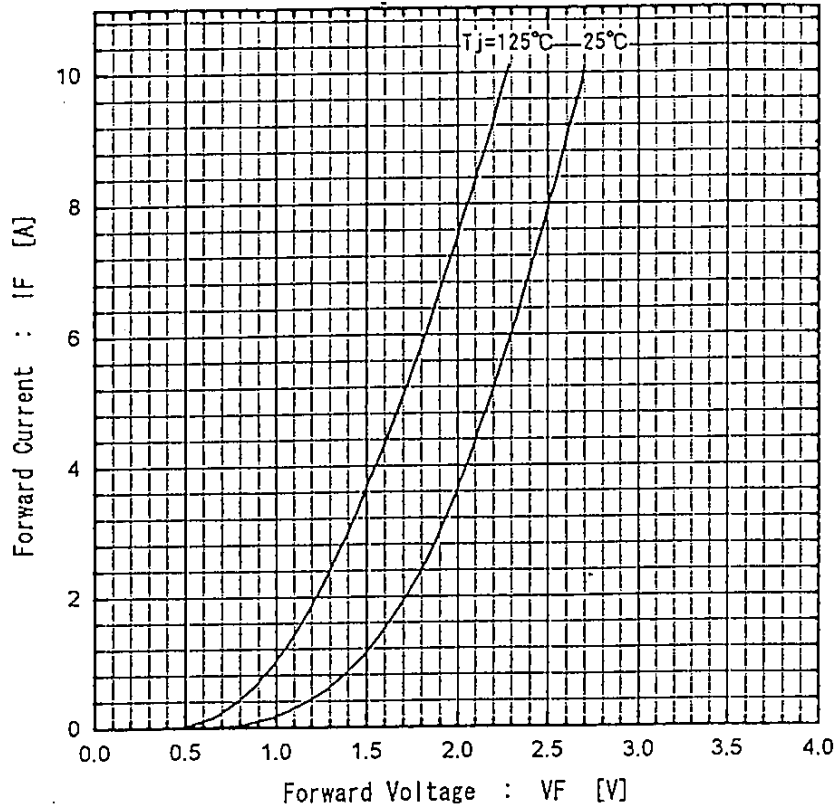
Items	Symbols	Characteristics			Conditions	Unit
		min.	typ.	max.		
Reverse Current	I_R	—	—	1.0	$V_R = 600 \text{ V}$	mA
forward voltage	VF	—	—	3.0	$I_F = 5\text{A}$	V
Reverse recovery time	t_{rr}	—	—	0.3	$I_F = 5\text{A}, V_R = 200\text{V}$ $di/dt = 100\text{A}/\mu\text{s}$	μs

5. Thermal resistance characteristics

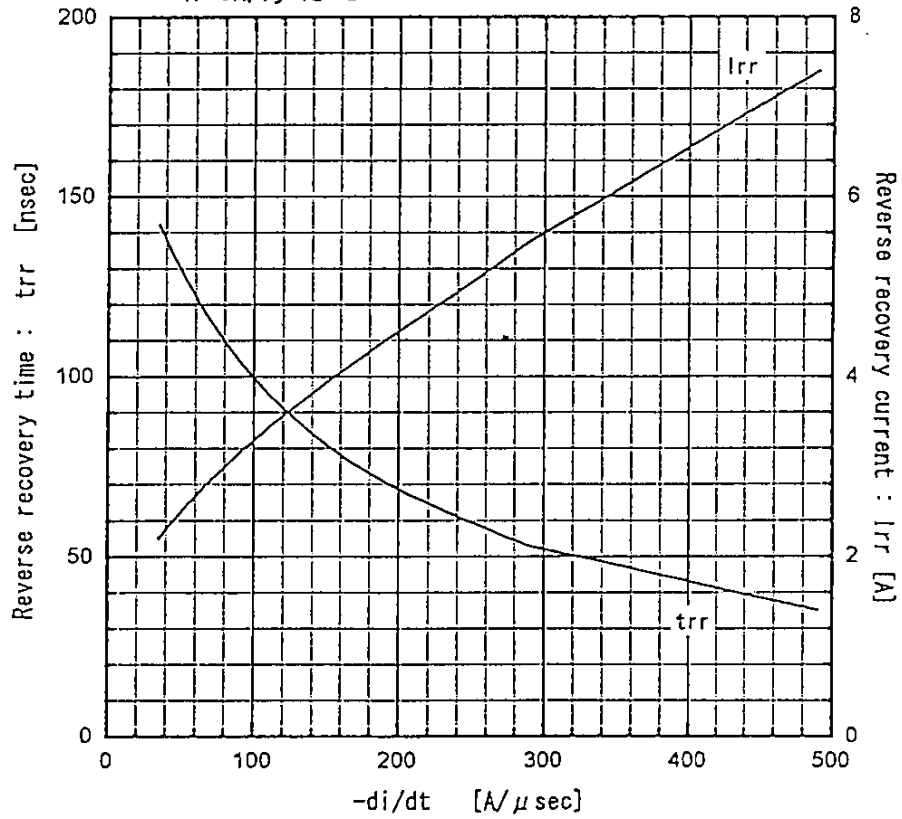
Items	Symbols	Characteristics			Conditions	Unit
		min.	typ.	max.		
Thermal resistance	$R_{th(j-c)}$	—	—	5.00	junction to case	$^{\circ}\text{C}/\text{W}$

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Forward voltage vs. Forward current

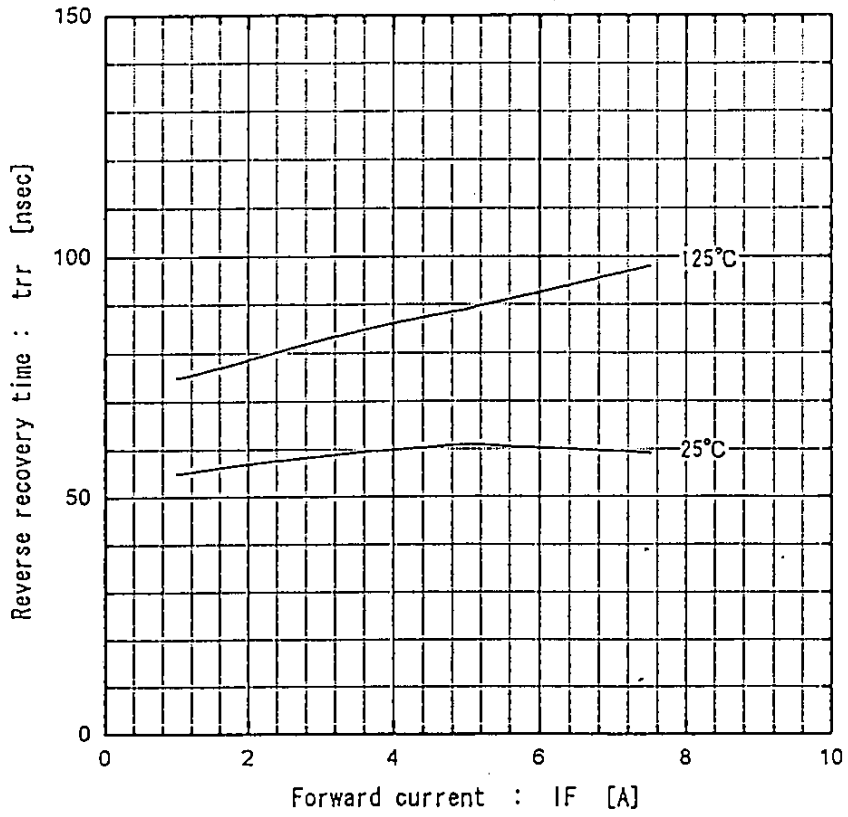


Reverse recovery characteristics vs. -di/dt
IF=5A, Tj=125°C

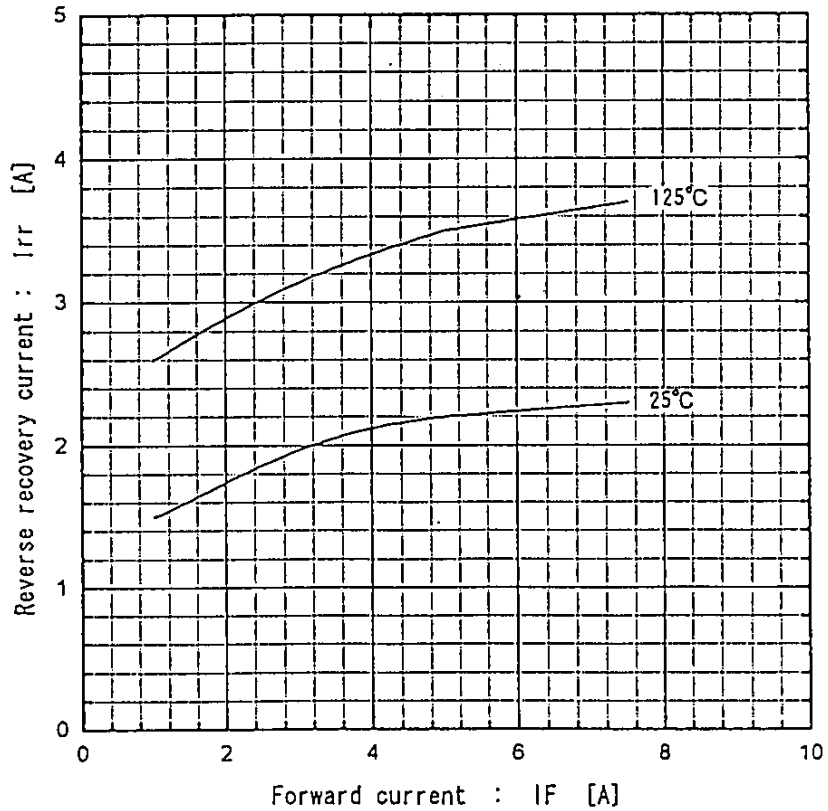


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Reverse recovery time vs. Forward current
 $V_R=200V, -di/dt=100A/\mu sec$



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



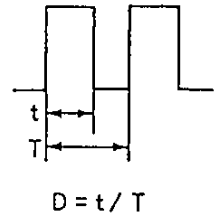
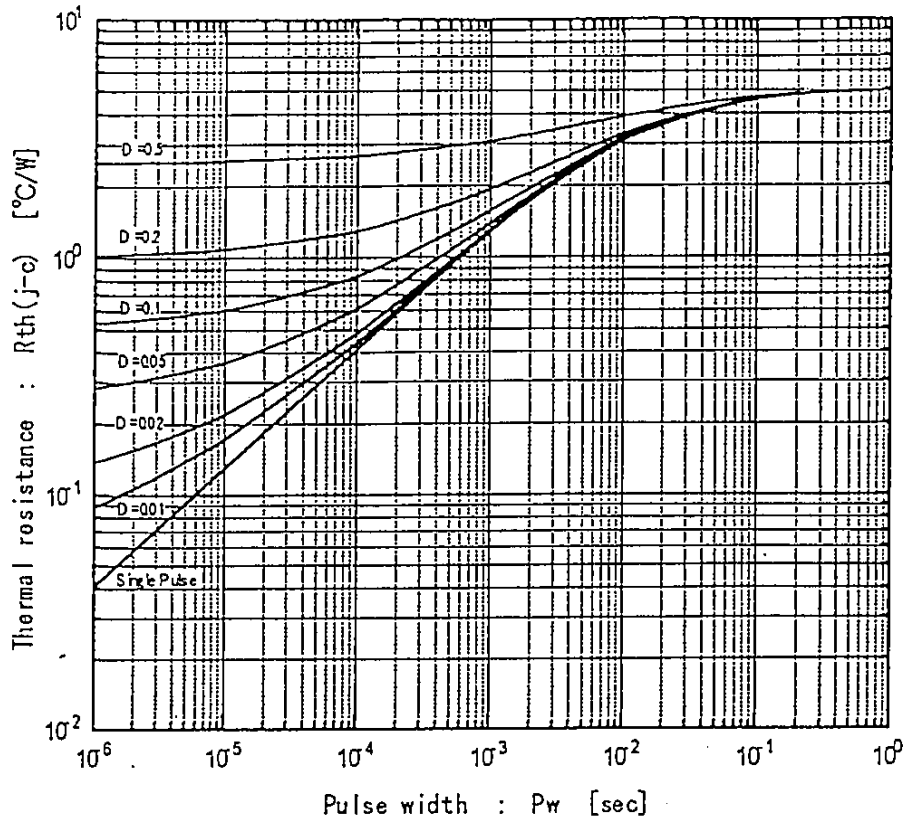
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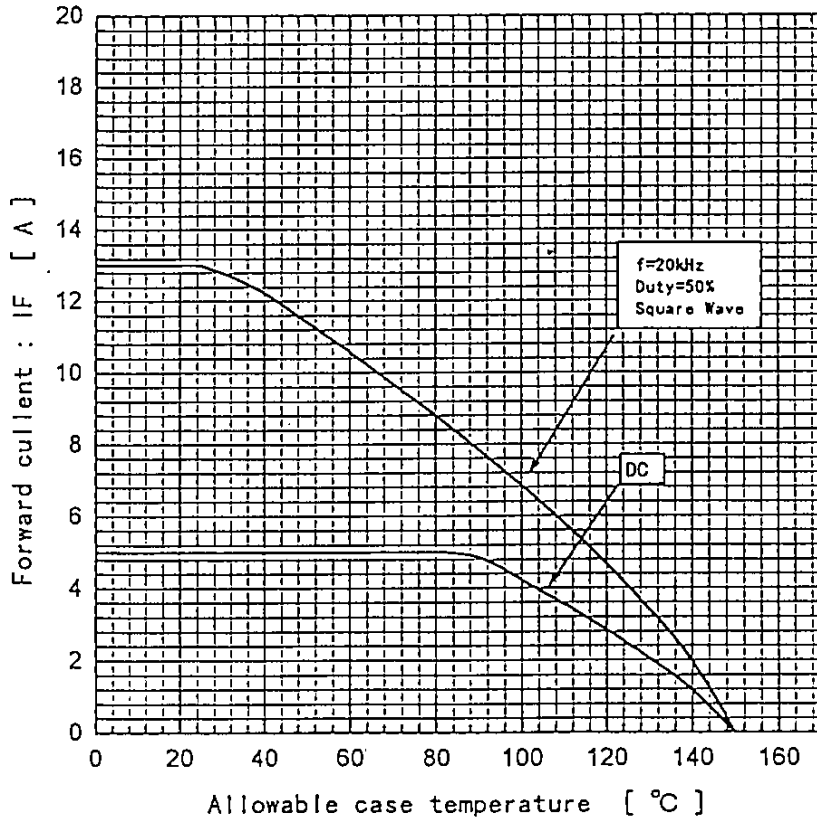
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Transient thermal resistance



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Forward current vs. Max. allowable case temperature



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