

SPECIFICATION

DEVICE NAME : SILICON DIODE

TYPE NAME : ERW12-120

SPEC. No. :

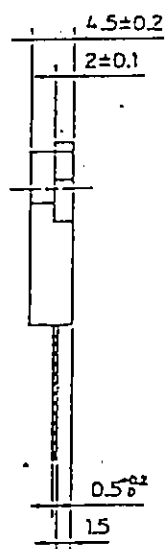
DATE :

Fuji Electric Co.,Ltd.

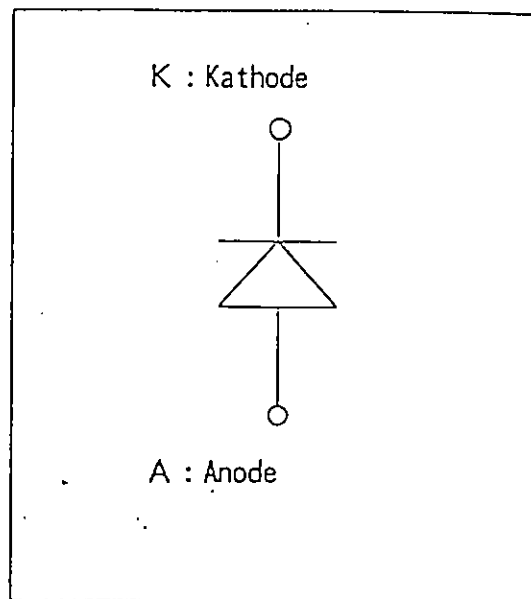
This Specification is subject to change without notice.

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

2. Equivalent circuit



EWJ : SC-65



Items	Symbols	Conditions	Ratings	Units
Repetitive Reverse Voltage	V_{RRM}	—————	1200	V
Repetitive peak surge current	I_{FM}	20kHz Duty50% Squ. wave	$T_c=113^{\circ}C$ 25	A
			$T_c=25^{\circ}C$ 63	A
Average rectified forward current	$I_F(AV)$	D C	25	A
Non-repetitive peak surge current	I_{FSM}	Pulse10ms, sin wave	120	A
Maximam Power Dissipaion	P_D	—————	110	W
Operating Temperature	T_j	—————	+150	$^{\circ}C$
Storage Temperature	T_{stg}	—————	-40 ~+150	$^{\circ}C$
Mounting Screw Torque	—————	—————	50	N · cm

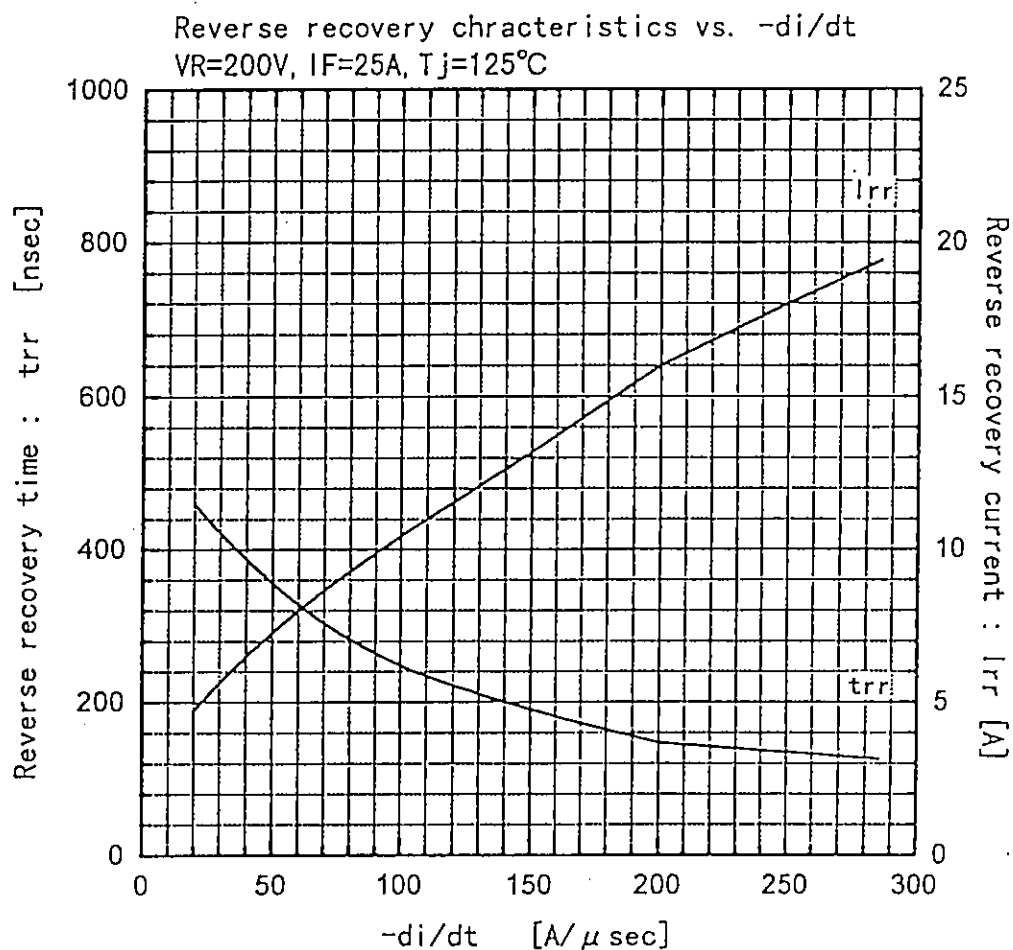
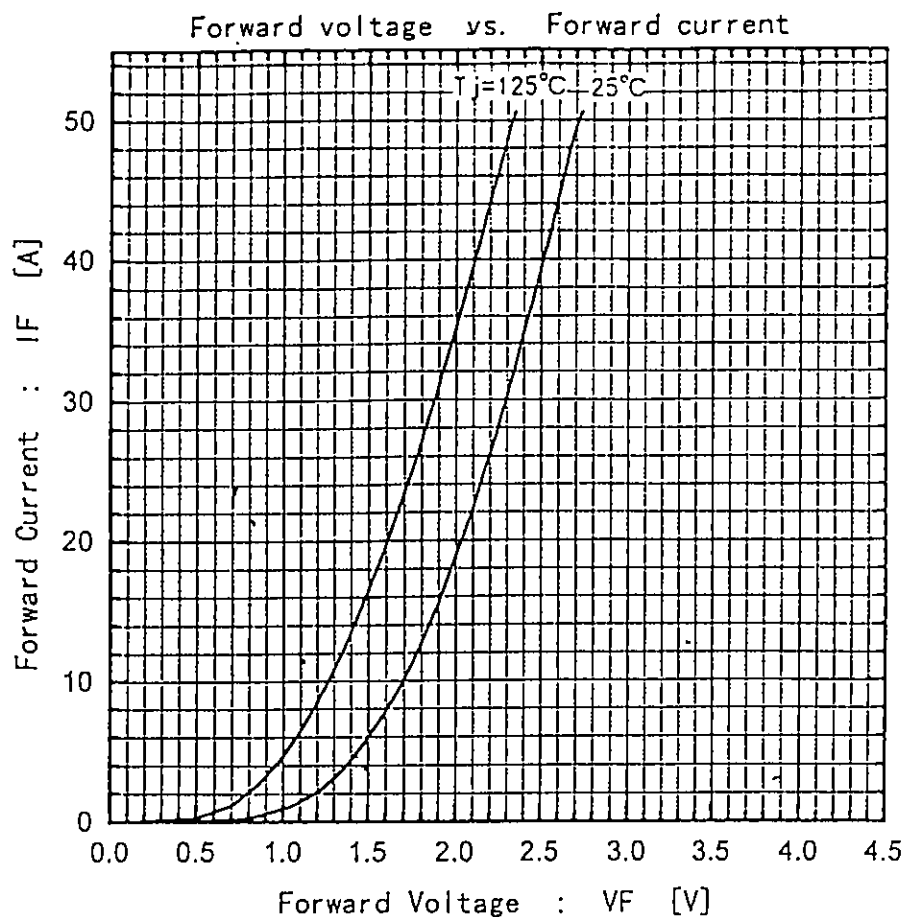
4. Electrical Characteristics (at $T_c=25^{\circ}\text{C}$ unless otherwise specified)

Items	Symbols	Characteristics			Conditions	Unit
		min.	typ.	max.		
Repetitive peak reverse voltage	V_{RRM}	1200	1350	—	$I_R = 1\text{mA}$	V
Reverse current	I_{RRM}	—	—	1.0	$V_R = 1200\text{V}$	mA
forward voltage	V_{FM}	—	—	3.0	$I_F = 25\text{A}$	V
Reverse recovery time	t_{rr}	—	—	0.3	$I_F=25\text{A}, V_R=200\text{V}$ $di/dt=100\text{A}/\mu\text{s}$	μs

5. Thermal resistance characteristics

Items	Symbols	Characteristics			Conditions	Unit
		min.	typ.	max.		
Thermal resistance	$R_{th(j-c)}$	—	—	1.13	junction to case	$^{\circ}\text{C}/\text{W}$

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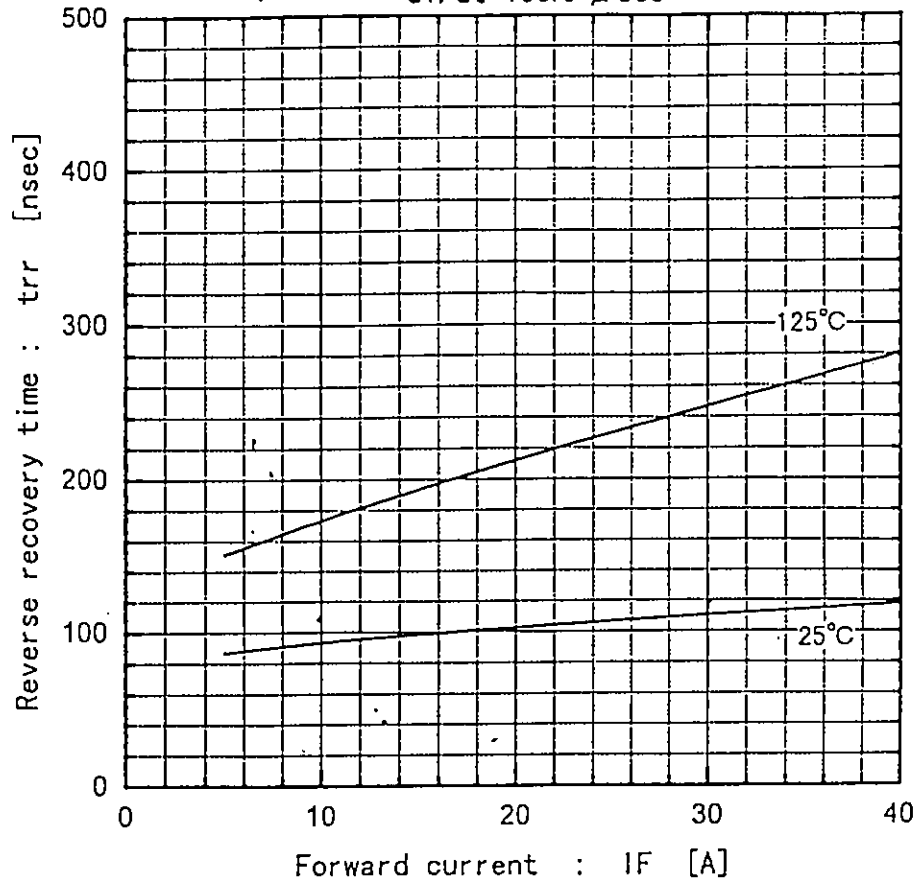
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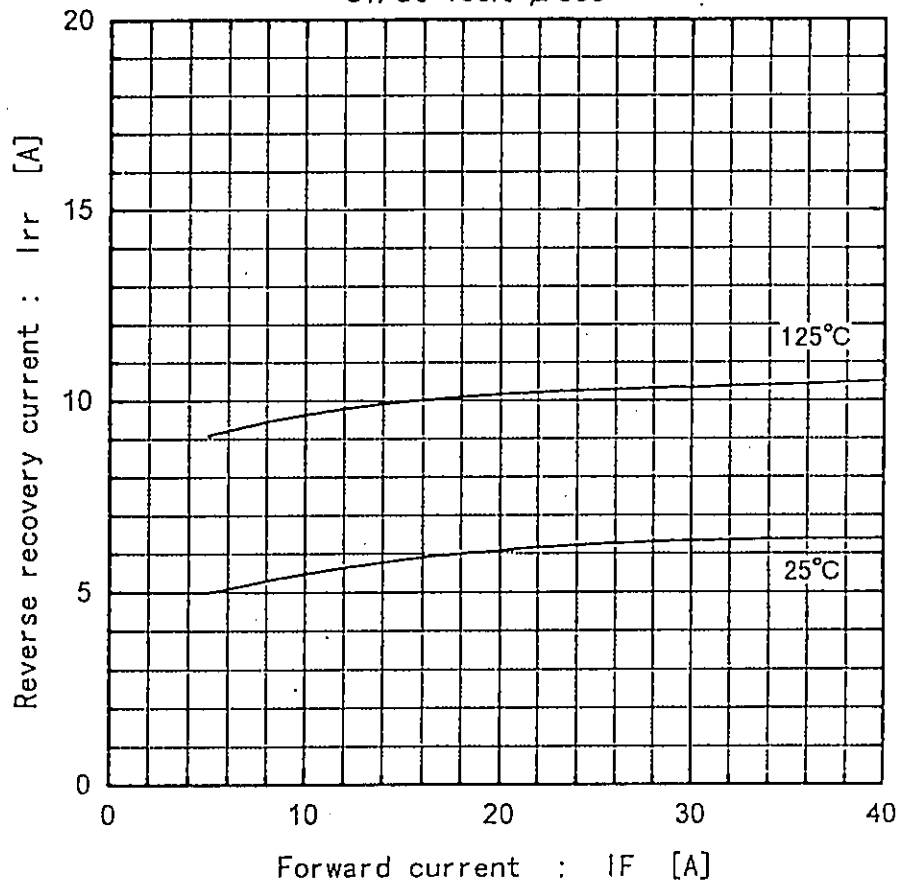
H04-004-03

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

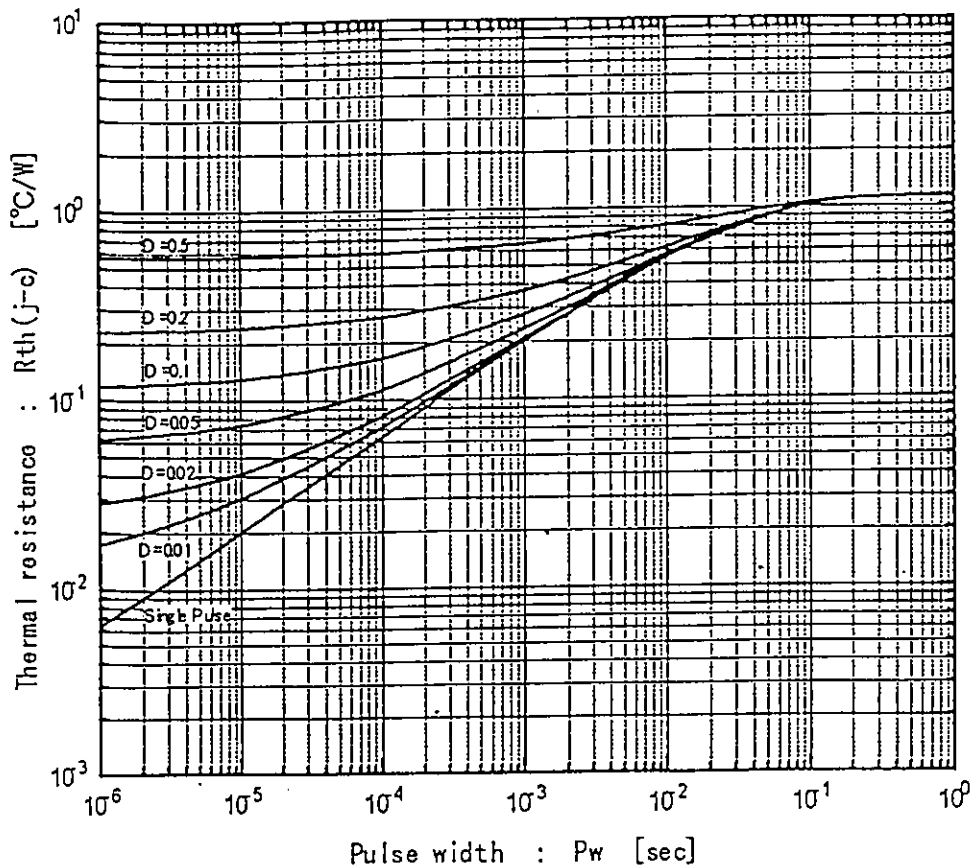


Reverse recovery current vs. Forward current
 $-di/dt=100A/\mu sec$

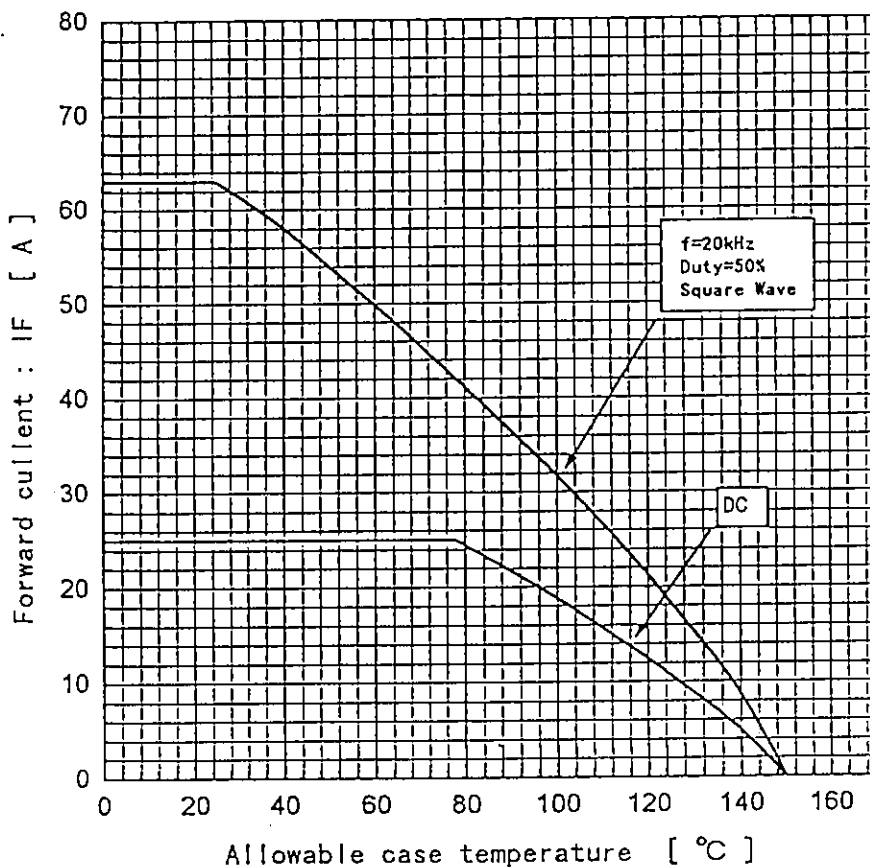


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Transient thermal resistance



Forward current vs. Max. allowable case temperature



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