

# SPECIFICATION

Device Name : SILICON DIODE

Type Name : YG902C2RF109

Spec. No. : MS5D0928

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Fuji Electric Co., Ltd.  
Matsumoto Factory

	DATE	NAME	APPROVED	<b>Fuji Electric Co., Ltd.</b>	
DRAWN	May-13-99	S. Matsumoto	S. Edo	DWG. NO.	MS5D0928 1/8
CHECKED	May-13-99	K. Sakuma			



### 1. SCOPE

This specification provides the ratings and the test requirement for FUJI SILICON DIODE YG902C2RF109

### 2. OUT VIEW · MARKING · MOLDING RESIN · FORMING · CHARACTERISTICS

- |  |             |              |
|--|-------------|--------------|
| (1) Out view is shown  | MS5D0928    | 4/8          |
| (2) Marking is shown   | MS5D0928    | 4/8          |
| It is marked to type name or abbreviated type name, polarity and Lot No. |             |              |
| (3) Formig is shown  | MS5D0928    | 5/8          |
| (4) Characteristics is shown   | MS5D0928    | 6/8 ~ 8/8    |
| (4) Molding resin  | Epoxy resin | UL94 : 94V-0 |

### 3. RATINGS

#### 3.1 MAXIMUM RATINGS

ITEM	SYMBOL	CONDITIONS	RATINGS	UNIT
Repetitive peak reverse voltage	$V_{RRM}$		200	V
Non-repetitive peak reverse voltage	$V_{RSM}$		200	V
Isolating voltage	$V_{iso}$	Terminals-to-Case, AC. 1min	1500	V
Average forward current	$I_O$	Square wave duty=1/2 $T_c=115^{\circ}C$	10 *	A
Non-repetitive surge current	$I_{FSM}$	Sine wave, 10ms	50	A
Operating junction temperature	$T_j$		-40to+150	$^{\circ}C$
Storage temperature	$T_{stg}$		-40to+150	$^{\circ}C$

\* Output current of centertap full wave connection.

#### 3.2 ELECTRICAL CHARACTERISTICS (at $T_a=25^{\circ}C$ unless otherwise specified.)

ITEM	SYMBOL	CONDITIONS	MAXIMUM	UNIT
Forward voltage	$V_F$	$I_F = 5 A$	0.95	V
Reverse current	$I_R$	$V_R = V_{RRM}$	100	$\mu A$
Reverse recovery time	$t_{rr}$	$I_F = 0.1A, I_R = 0.2A, I_{rec} = 0.05A$	35	ns
Thermal resistance	$R_{th(j-c)}$	Junction to case	3.5	$^{\circ}C/W$

#### 3.3 MECHANICAL CHARACTERISTICS

Mounting torque	Recommended torque	0.3 ~ 0.5	N · m
Approximate weight		2.0	g

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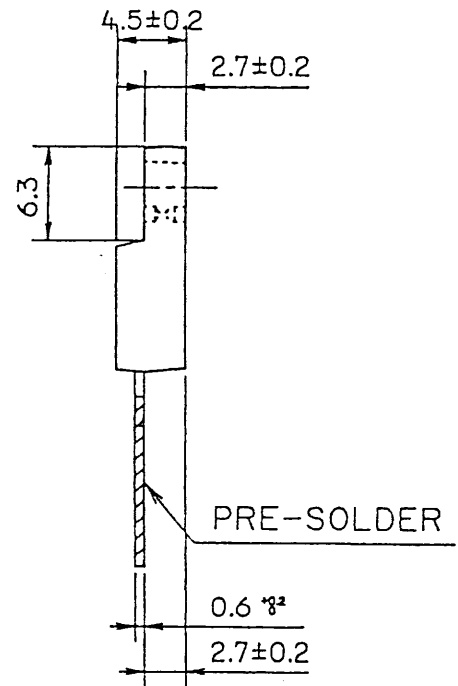
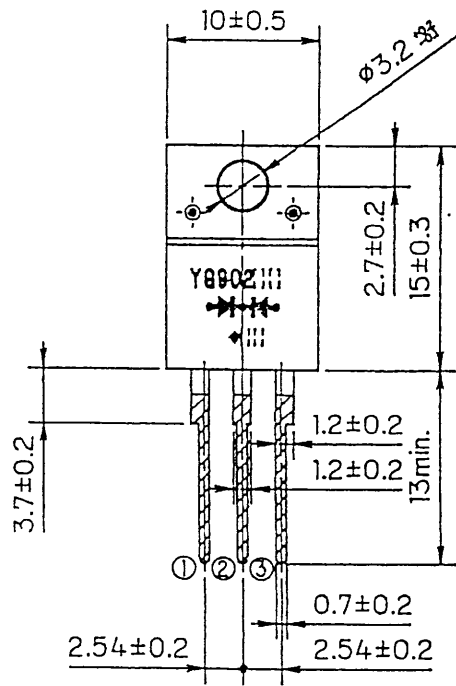
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DWG. NO.

MS5D0928 3/8

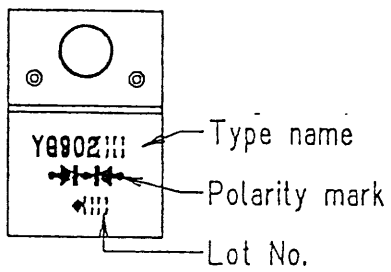
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OUT VIEW



DIMENSIONS ARE IN MILLIMETERS.

MARKING



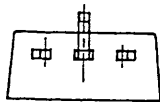
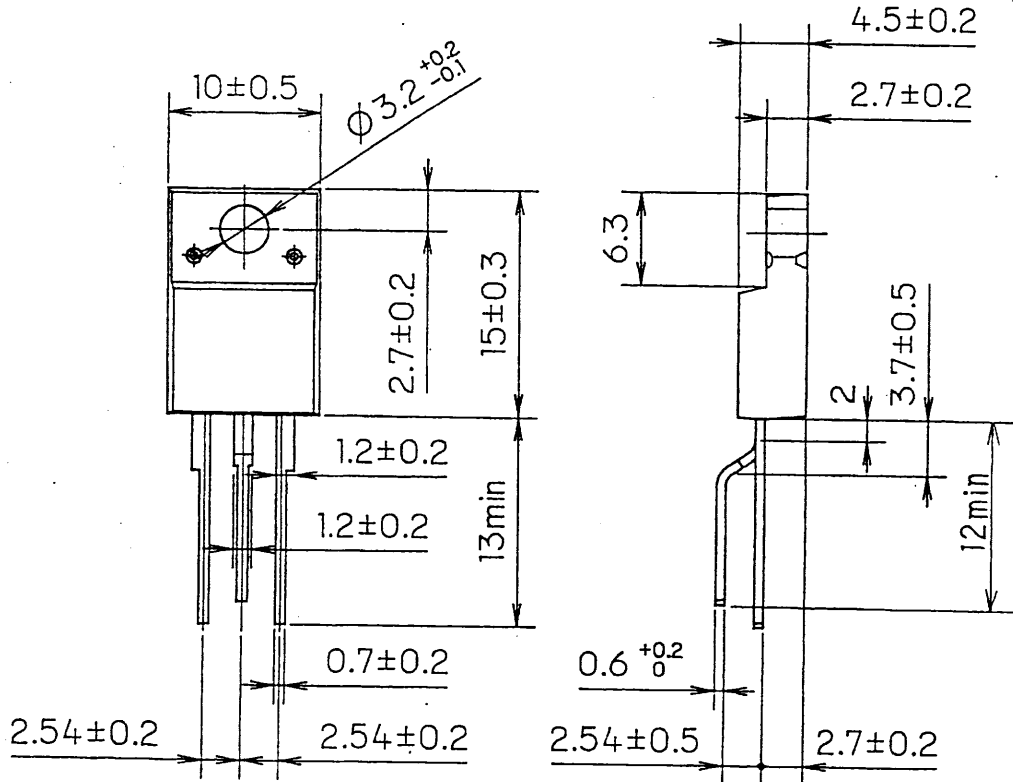
CONNECTION

YG902C



T0-220F15

F109フォーミング寸法図



寸法単位 (mm)  
Dimension (mm)

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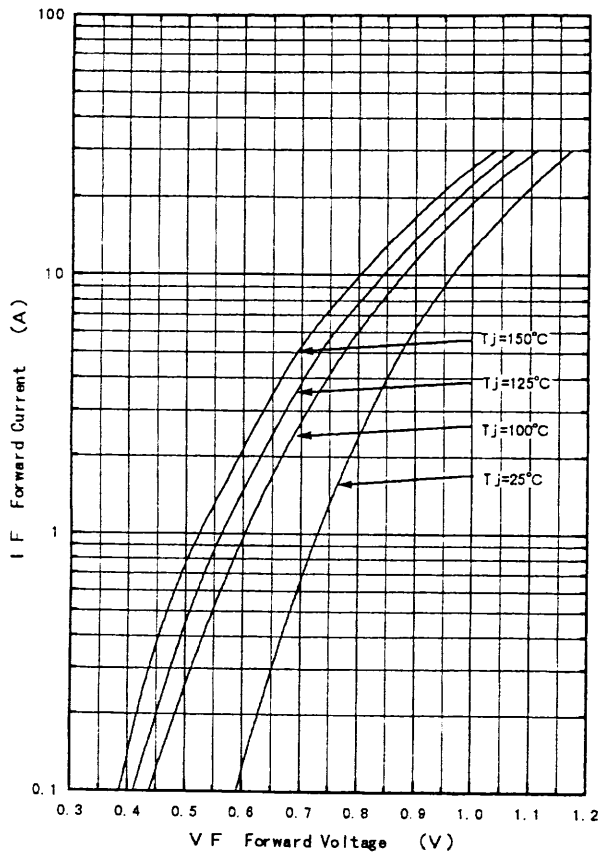
DWG. NO.

MS5D 0928 5/8

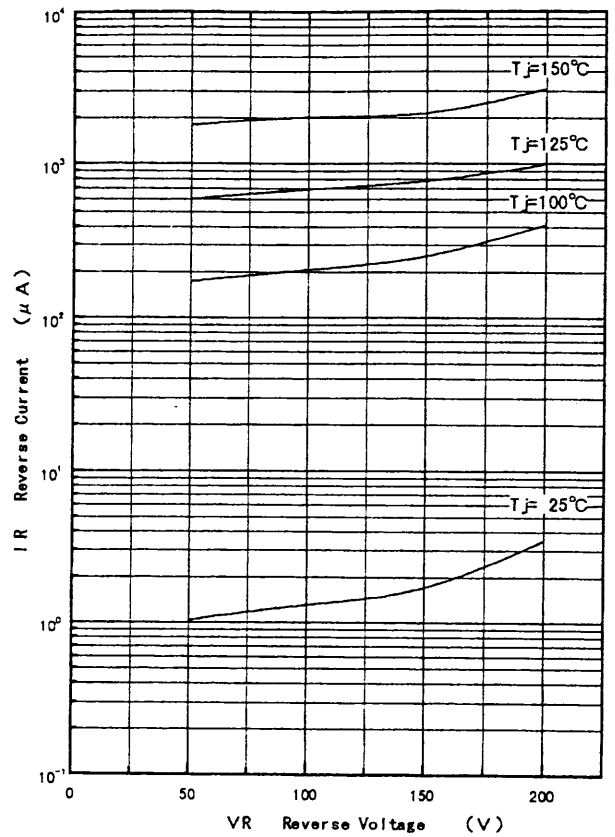

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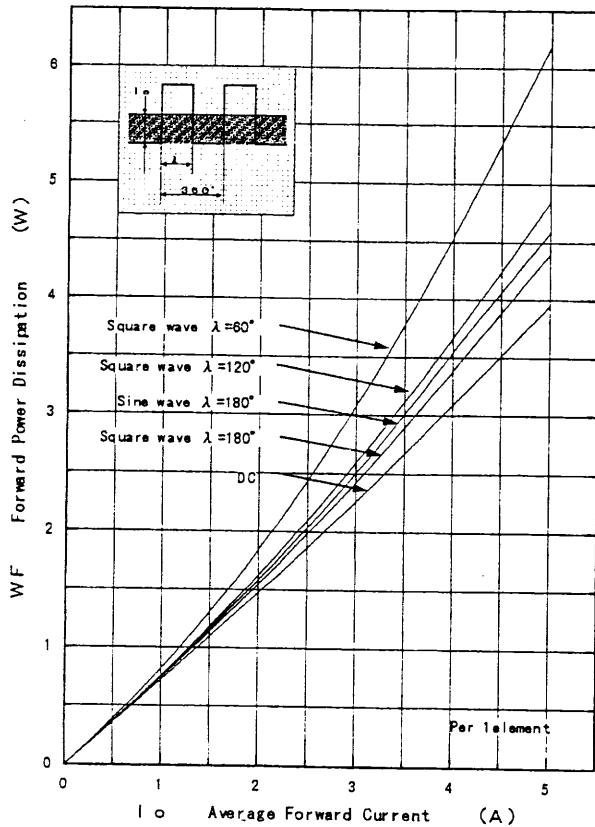
Forward Characteristic (typ.)



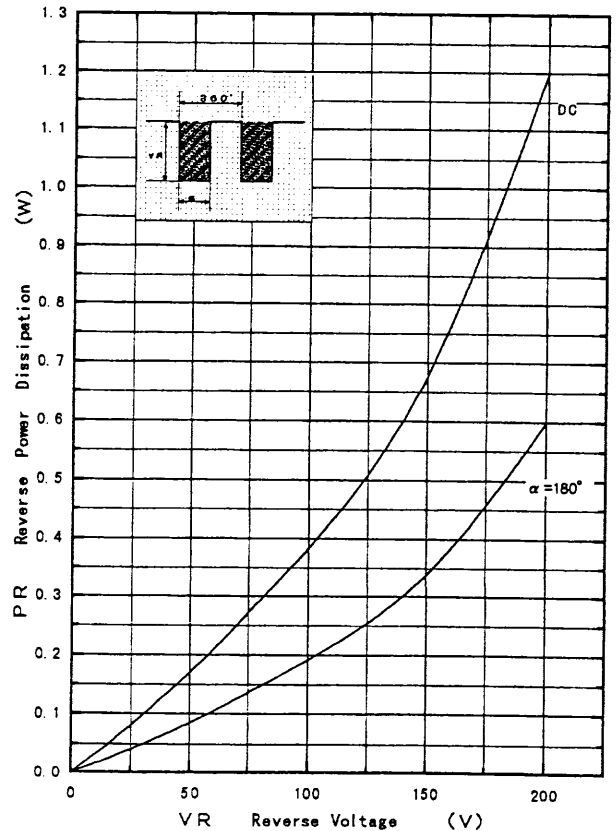
Reverse Characteristic (typ.)



Forward Power Dissipation

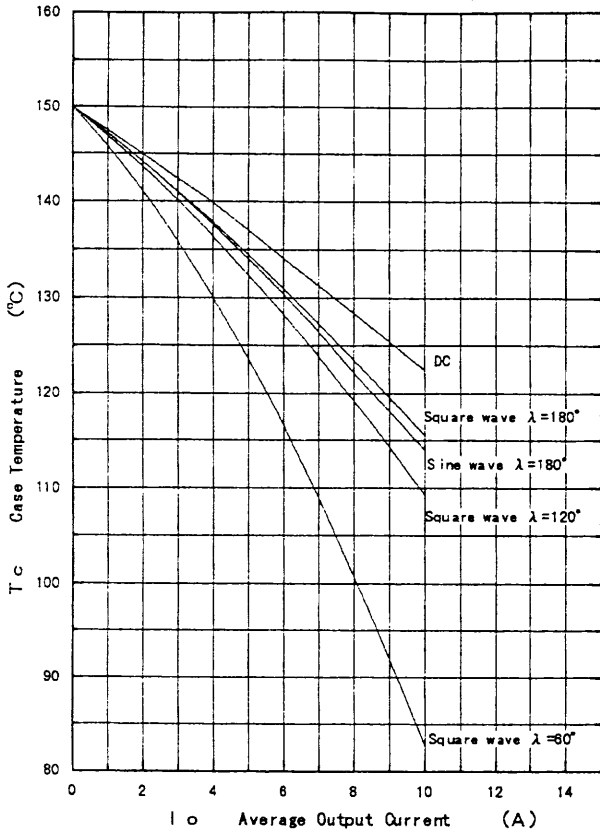


Reverse Power Dissipation



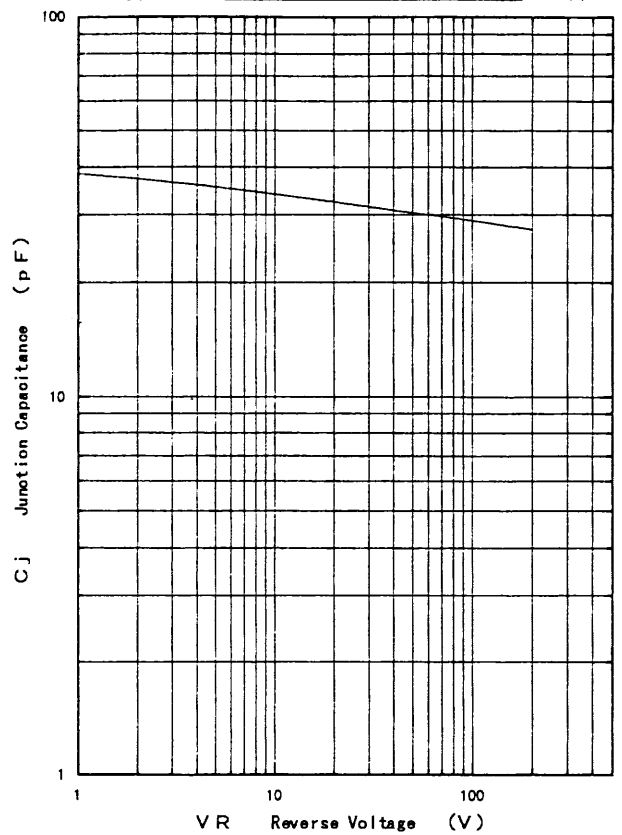
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Current Derating (I<sub>o</sub>-T<sub>c</sub>)

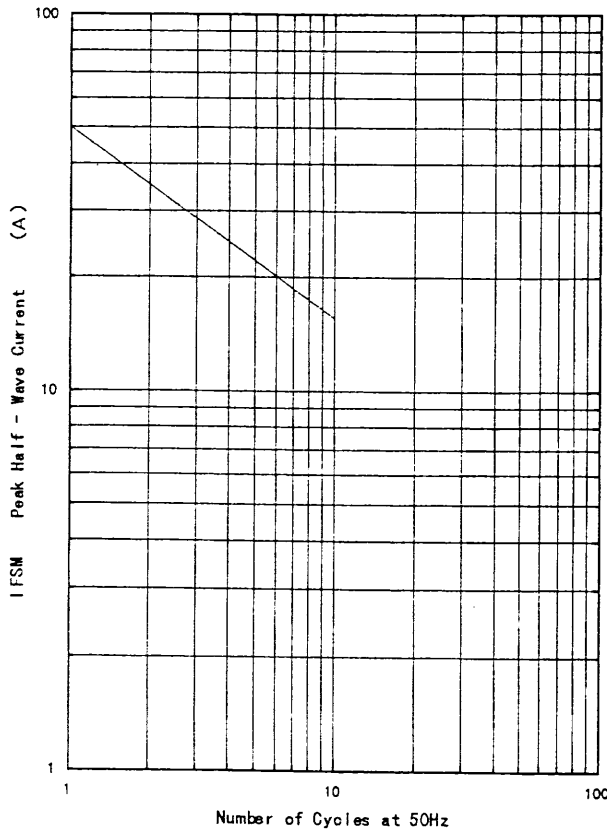


λ: Conduction angle of forward current for each rectifier element  
 I<sub>o</sub>: Output current of center-tap full wave connection

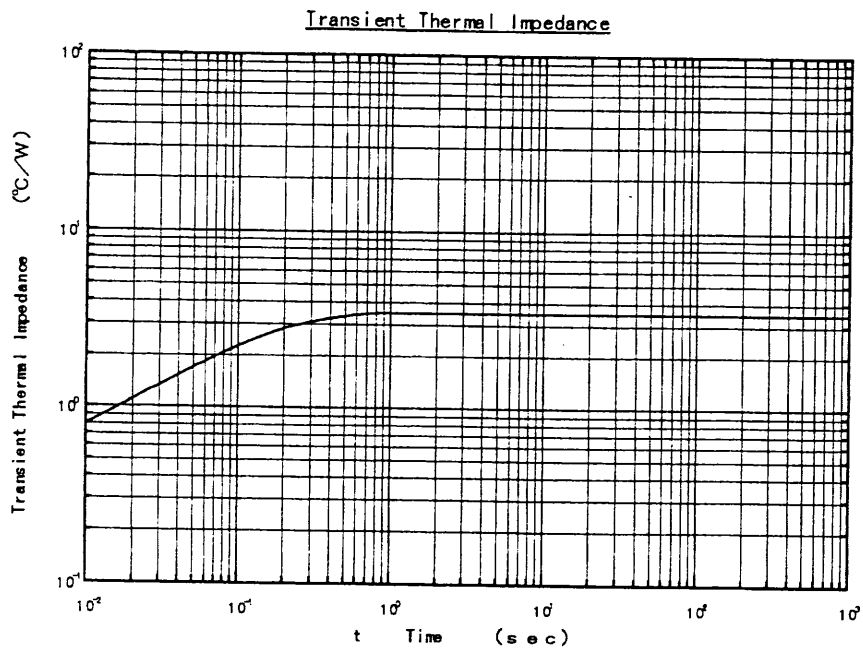
Junction Capacitance Characteristic (typ.)



Surge Capability



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8 / 8