

SPECIFICATION

Device Name : SILICON DIODE

Type Name : YG802C09R

Spec. No. :

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Fuji Electric Co., Ltd.
Matsumoto Factory

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1. SCOPE

This specification provides the ratings and the test requirement for FUJI SILICON DIODE YG802C09R

2. OUT VIEW · MARKING · MOLDING RESIN

(1) Out view is shown

(2) Marking is shown

It is marked to type name or abbreviated type name, polarity and Lot No.

(3) Molding resin

Epoxy resin UL94:94V-0

3. RATINGS

3.1 MAXIMUM RATINGS

| ITEM | SYMBOL | CONDITIONS | RATINGS | UNITS |
|---------------------------------------|-----------|--|-----------|-------------|
| Repetitive peak surge reverse voltage | V_{RSM} | $t_w=500ns, duty=1/40$ | 100 | V |
| Repetitive peak reverse voltage | V_{RRM} | | 90 | V |
| Isolating voltage | V_{iso} | Terminals-to-Case, AC, 1min | 1500 | V |
| Average forward current | I_o | Square wave duty=1/2 $T_c=102^{\circ}C$ | 10 * | A |
| Non-repetitive surge current | I_{FSM} | Sine wave, 10ms | 80 | A |
| Operating junction temperature | T_j | | 150 | $^{\circ}C$ |
| Storage temperature | T_{stg} | | -40to+150 | $^{\circ}C$ |

* Out put current of centertap full wave connection.

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

| ITEM | SYMBOL | CONDITIONS | MAXIMUM | UNITS |
|--------------------|---------------|------------------|---------|---------------|
| Forward voltage ** | V_F | $I_F = 4 A$ | 0.9 | V |
| Reverse current ** | I_R | $V_R = V_{RRM}$ | 5.0 | mA |
| Thermal resistance | $R_{th(j-c)}$ | Junction to case | 3.5 | $^{\circ}C/W$ |

** Rating per element

3.3 MECHANICAL CHARACTERISTICS

| | | | |
|-----------------|--------------------|-----------|-------|
| Mounting torque | Recommended torque | 0.3 ~ 0.5 | N · m |
| Weight | | 2.0 | g |

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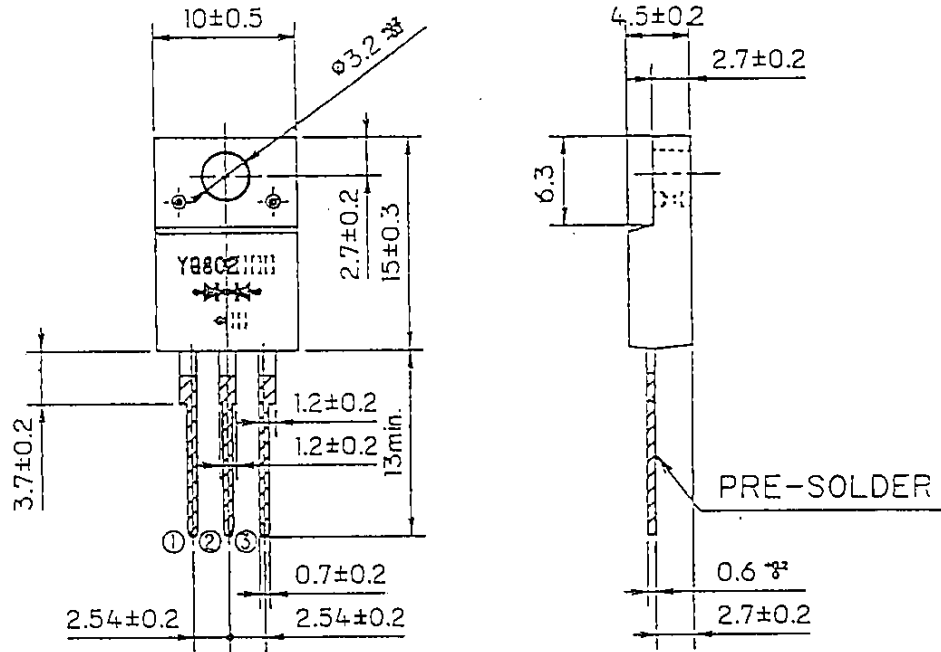
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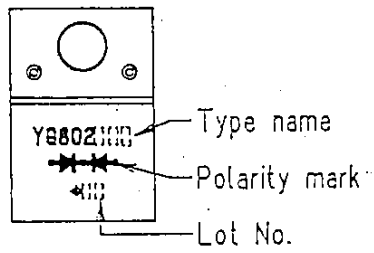
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OUT VIEW



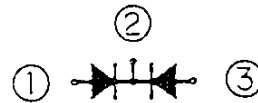
DIMENSIONS ARE IN MILLIMETERS.

MARKING



CONNECTION

YG802CIIIIR

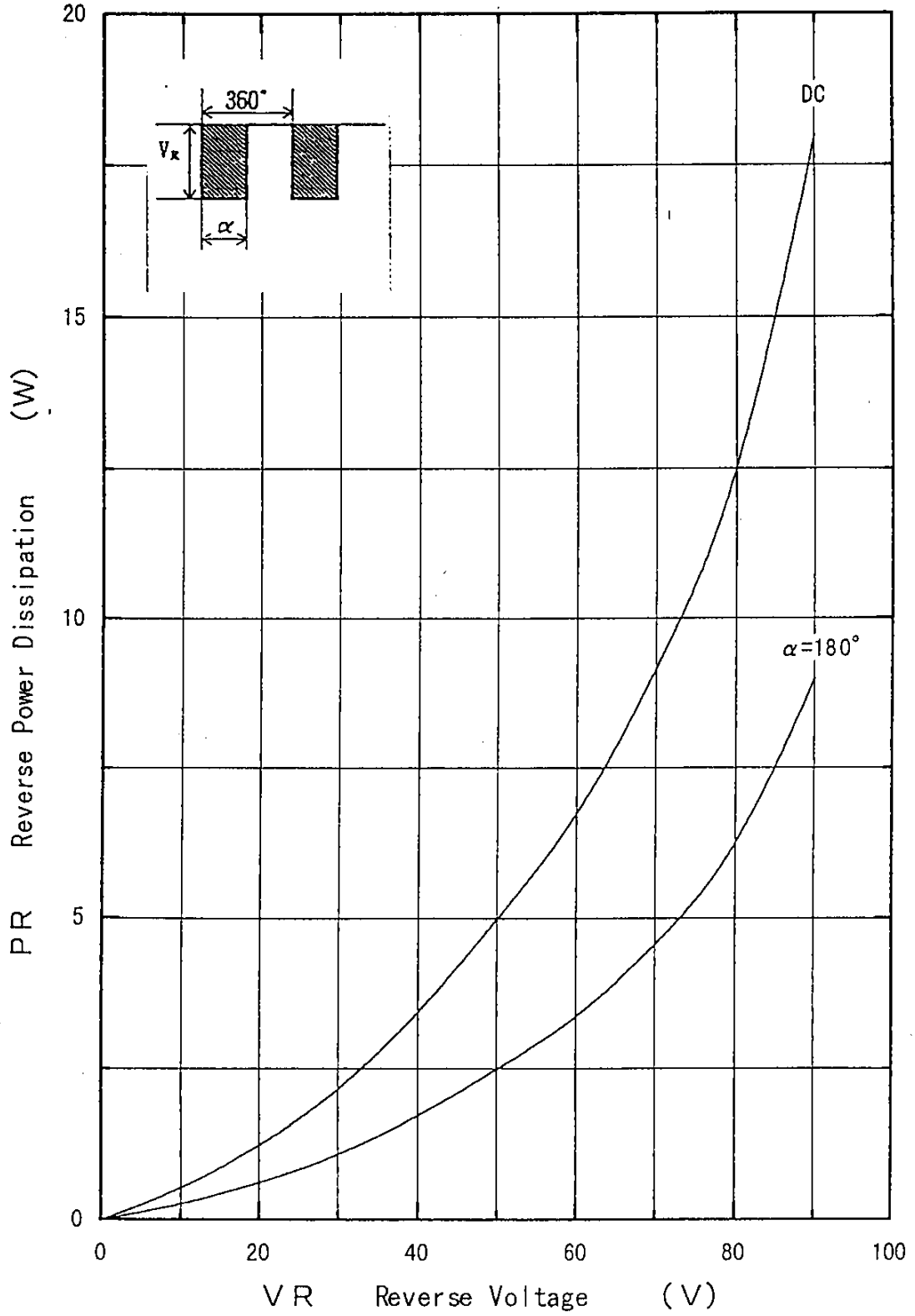


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Reverse Power Dissipation



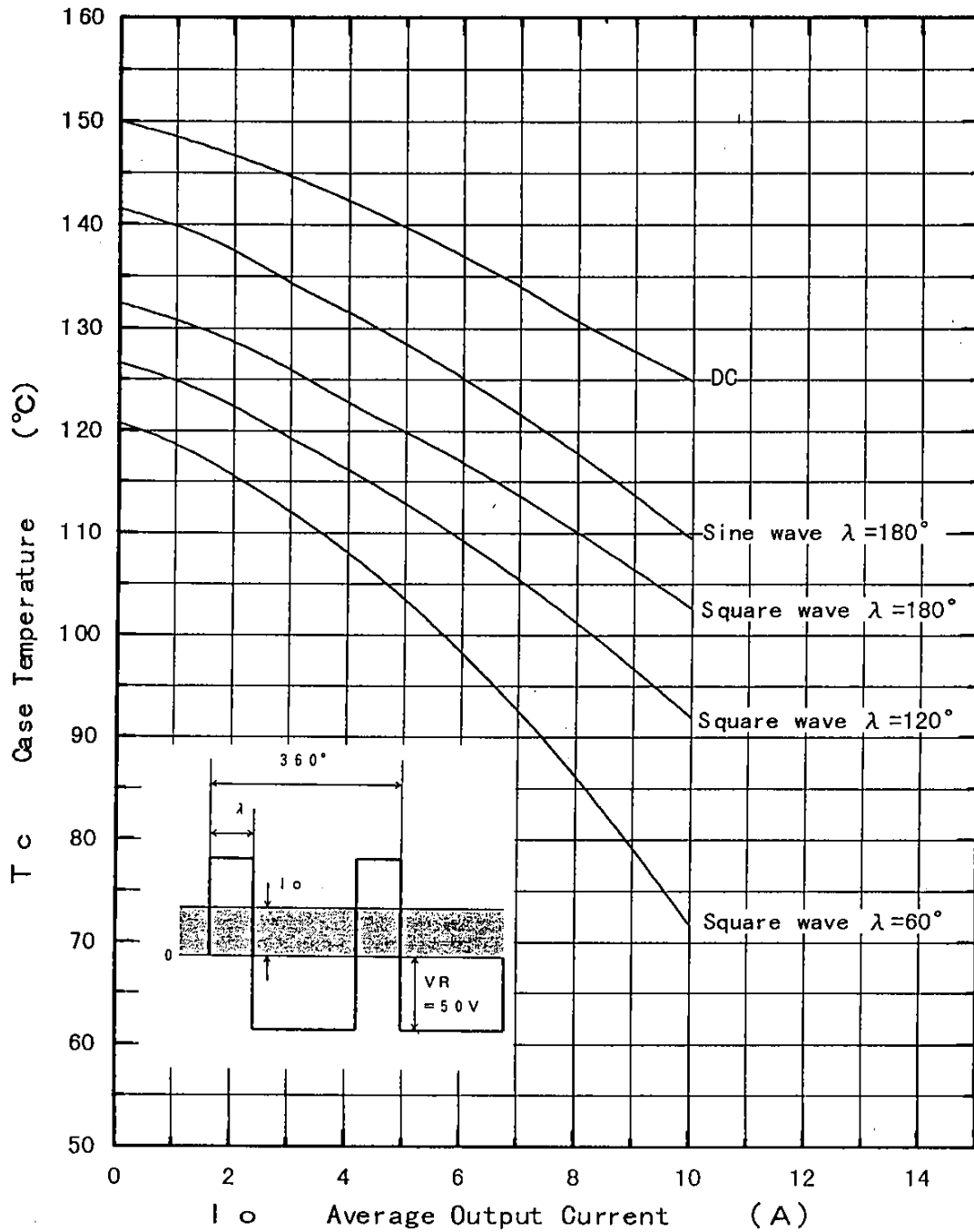
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Current Derating (Io-Tc)



λ : Conduction angle of forward current for each rectifier element
 I_o : Output current of center-tap full wave connection

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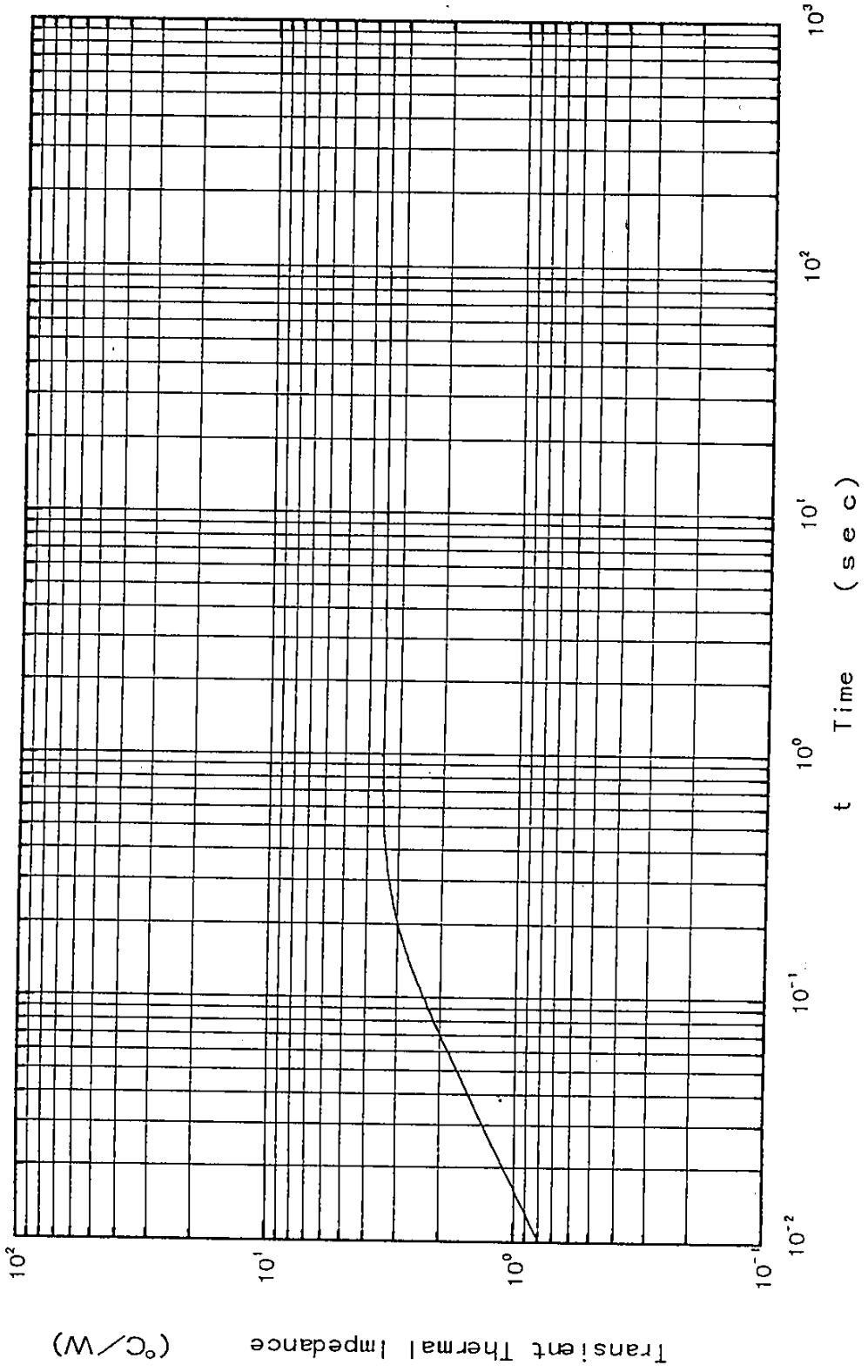
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Transient Thermal Impedance



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