

SPECIFICATION

Device Name : SILICON DIODE

Type Name : YG811S04R

Spec. No. :

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Matsumoto Factory

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1. SCOPE

This specification provides the ratings and the test requirement for FUJI SILICON DIODE YG811S04R

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} | $t_w=500ns, duty=1/40$ | 48 | V |
| Repetitive peak reverse voltage | V_{RRM} | | 40 | V |
| Isolating voltage | V_{iso} | Terminals-to-Case, AC, 1min | 1500 | V |
| Average forward current | I_o | Square wave duty=1/2 $T_c=122^{\circ}C$ | 5 | A |
| Non-repetitive surge current | I_{FSM} | Sine wave, 10ms | 120 | A |
| Operating junction temperature | T_j | | 150 | $^{\circ}C$ |
| Storage temperature | T_{stg} | | -40 to +150 | $^{\circ}C$ |

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

| ITEM | SYMBOL | CONDITIONS | MAXIMUM | UNITS |
|--------------------|---------------|------------------|---------|---------------|
| Forward voltage ** | V_F | $I_F = 5 A$ | 0.55 | V |
| Reverse current ** | I_R | $V_R = V_{RRM}$ | 5.0 | mA |
| Thermal resistance | $R_{th(j-c)}$ | Junction to case | 5.0 | $^{\circ}C/W$ |

** Rating per element

3.3 MECHANICAL CHARACTERISTICS

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

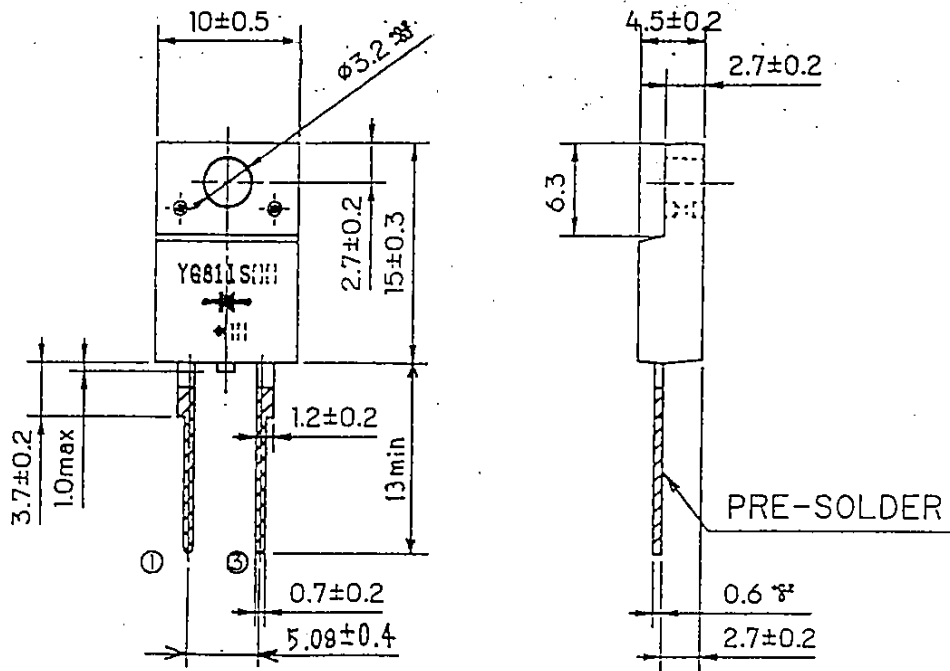
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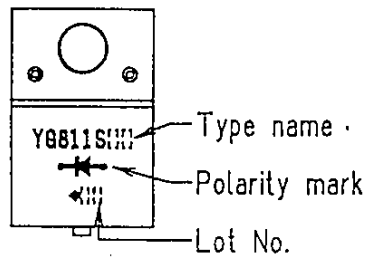
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OUT VIEW



DIMENSIONS ARE IN MILLIMETERS.

MARKING

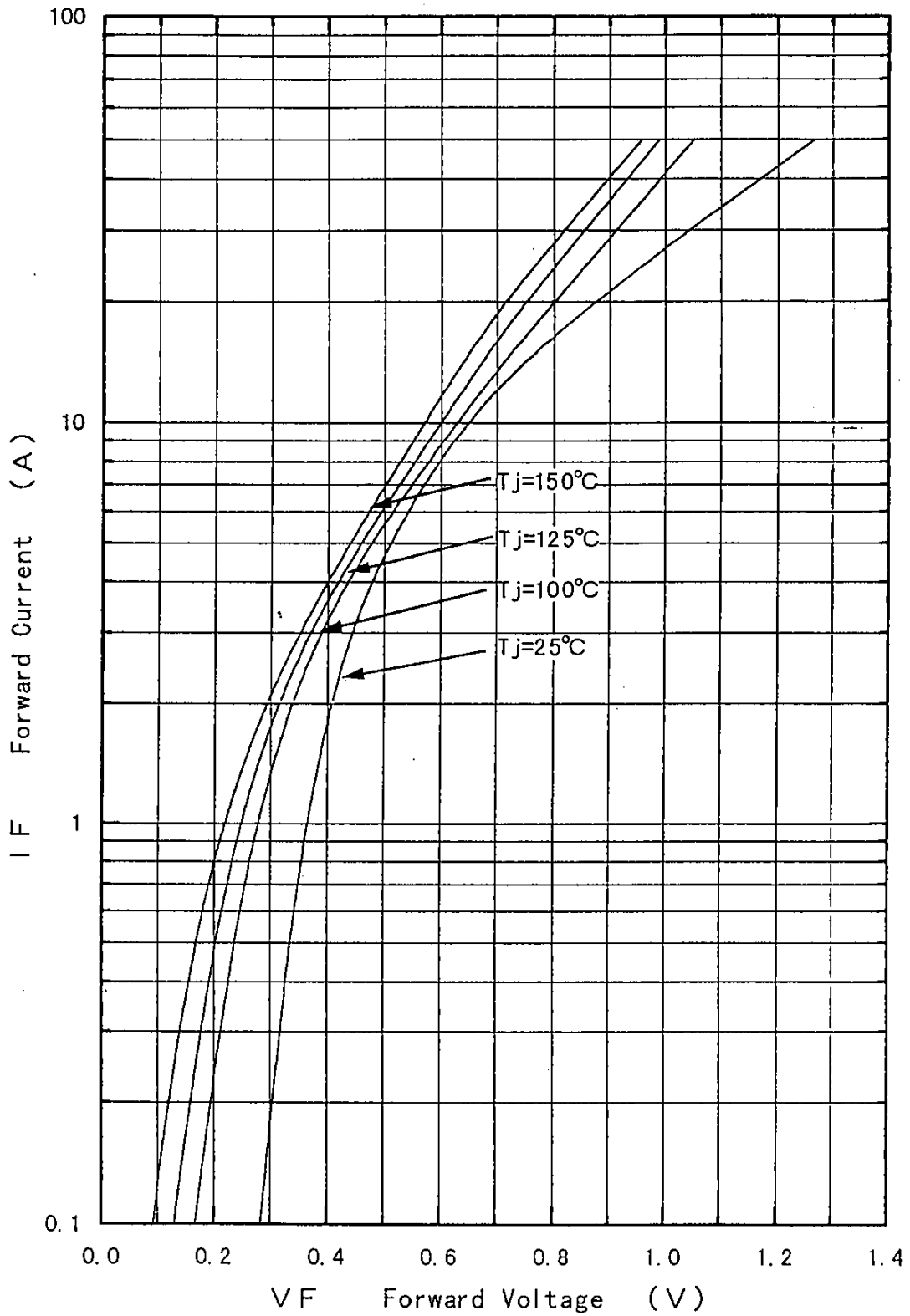


CONNECTION



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Forward Characteristic (typ.)



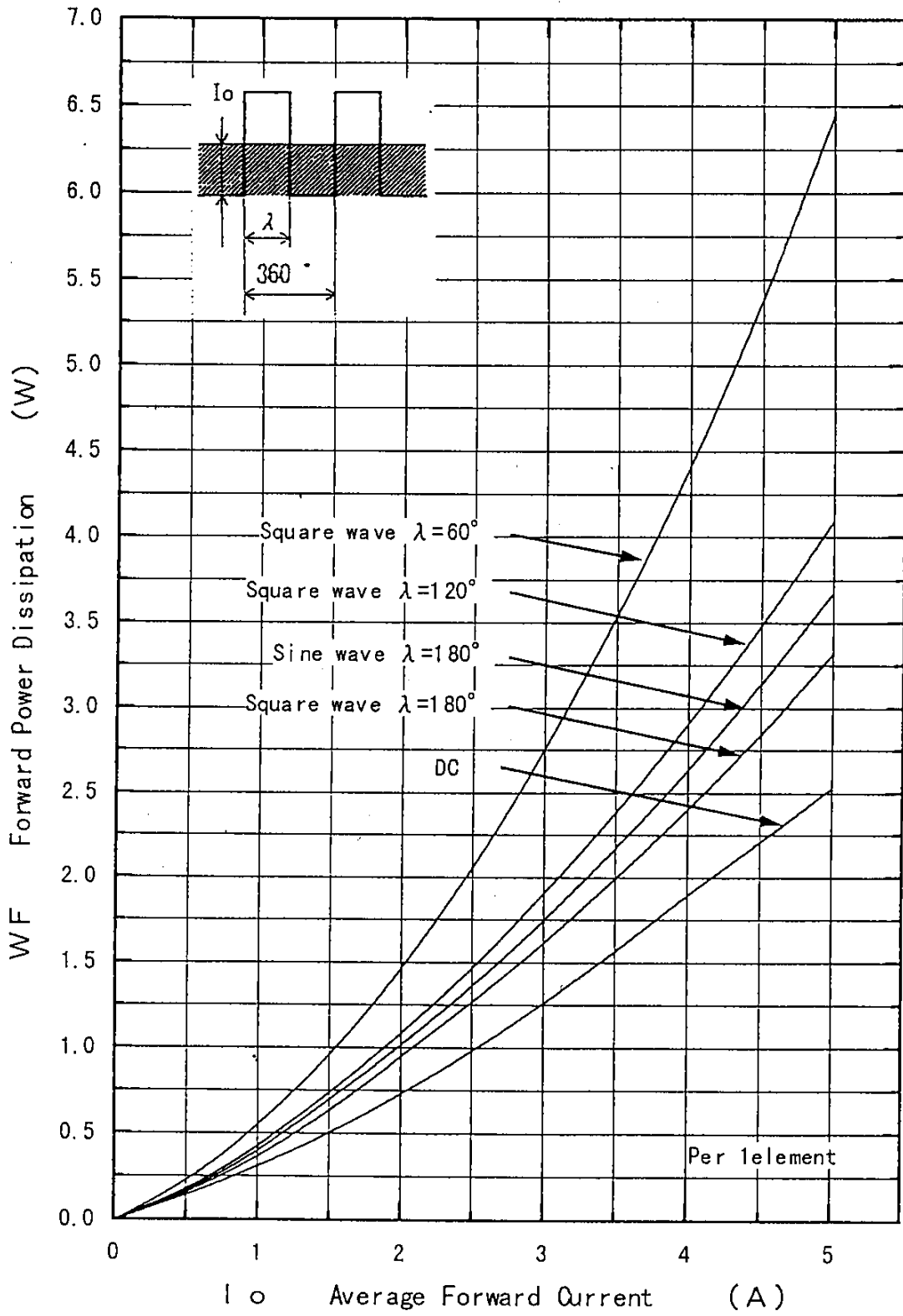
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Forward Power Dissipation



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Per 1element

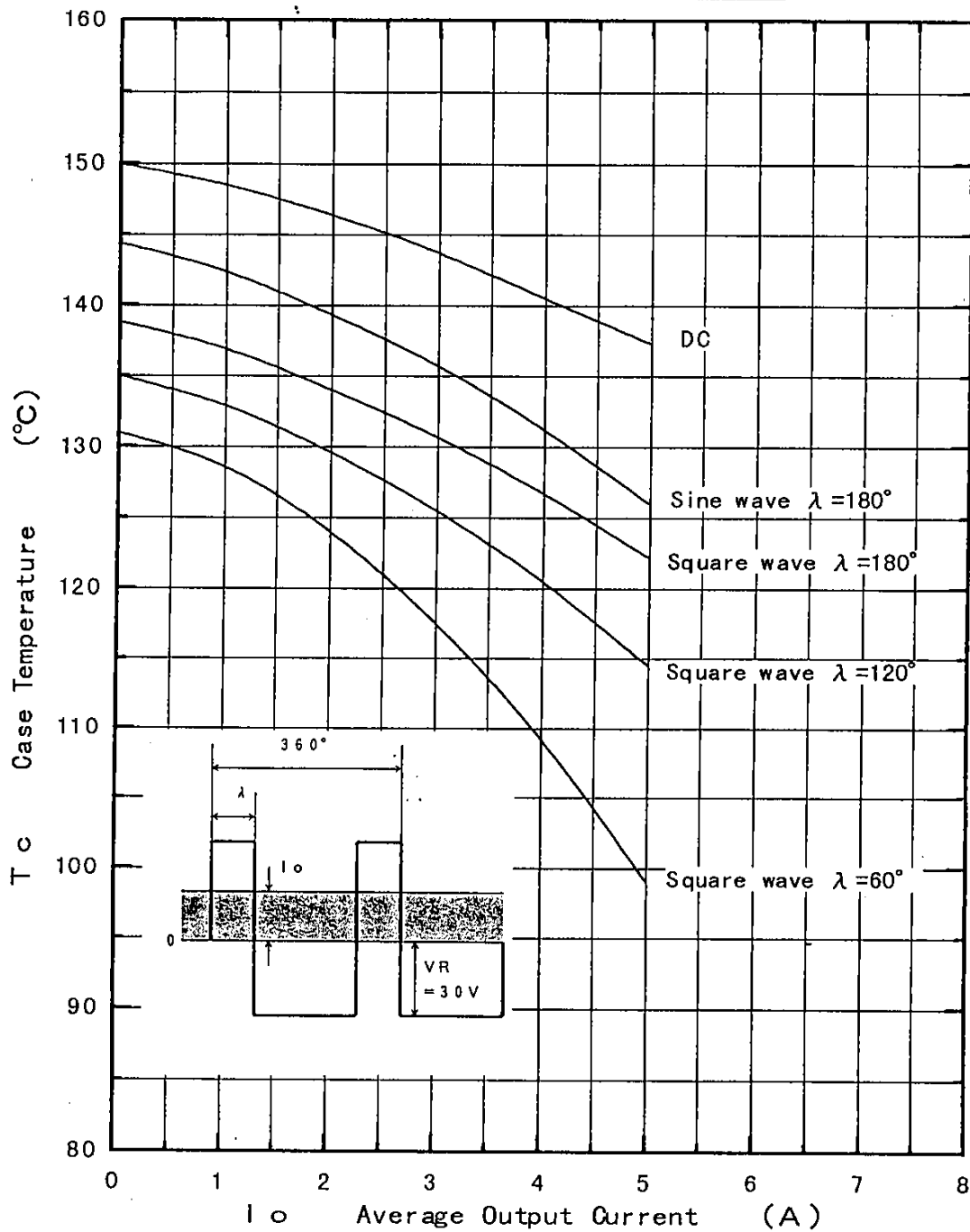
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Current Derating (I_o-T_c)



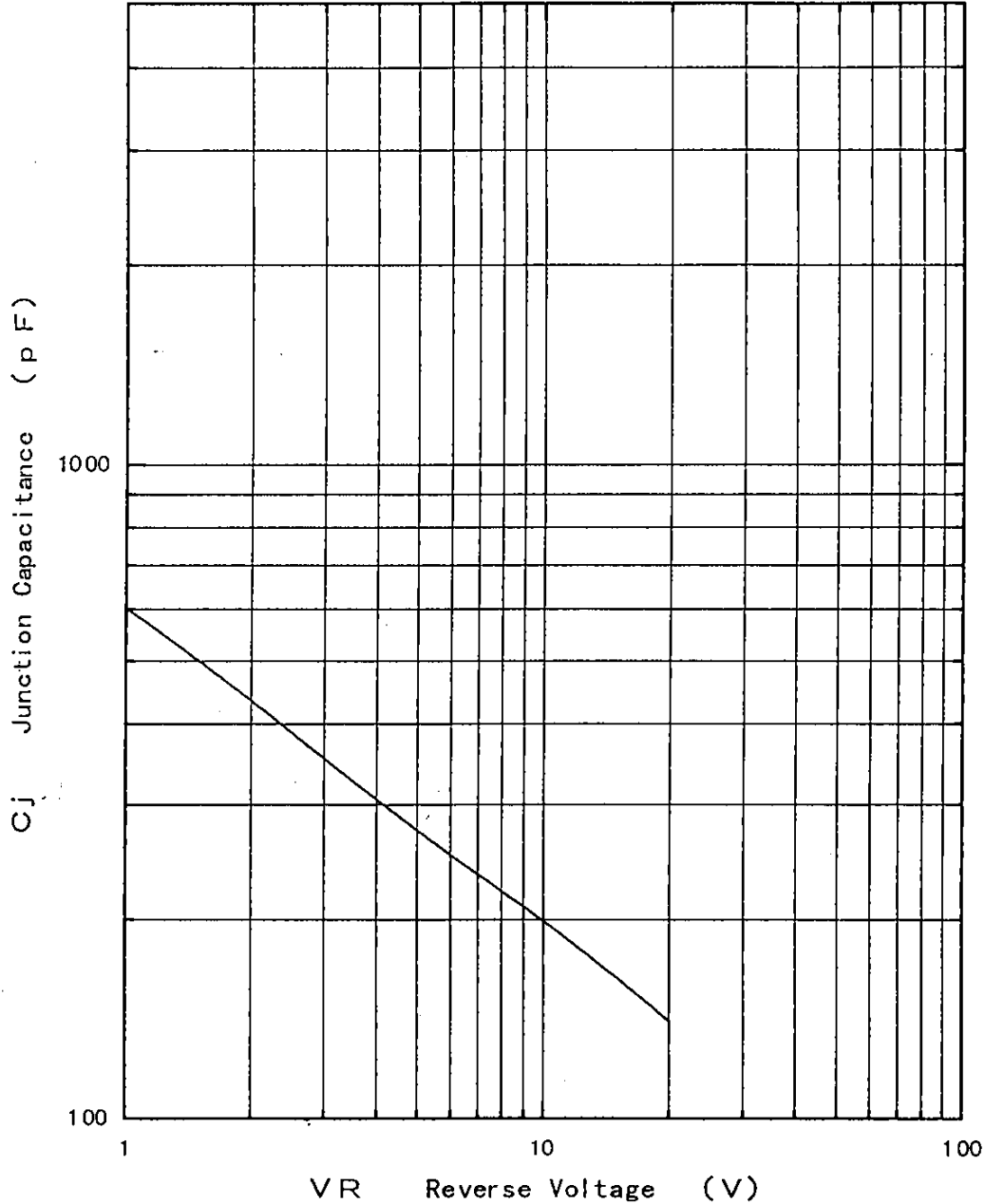
λ: Conduction angle of forward current for each rectifier element
 I_o: Output current of center-tap full wave connection

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Junction Capacitance Characteristic (typ.)



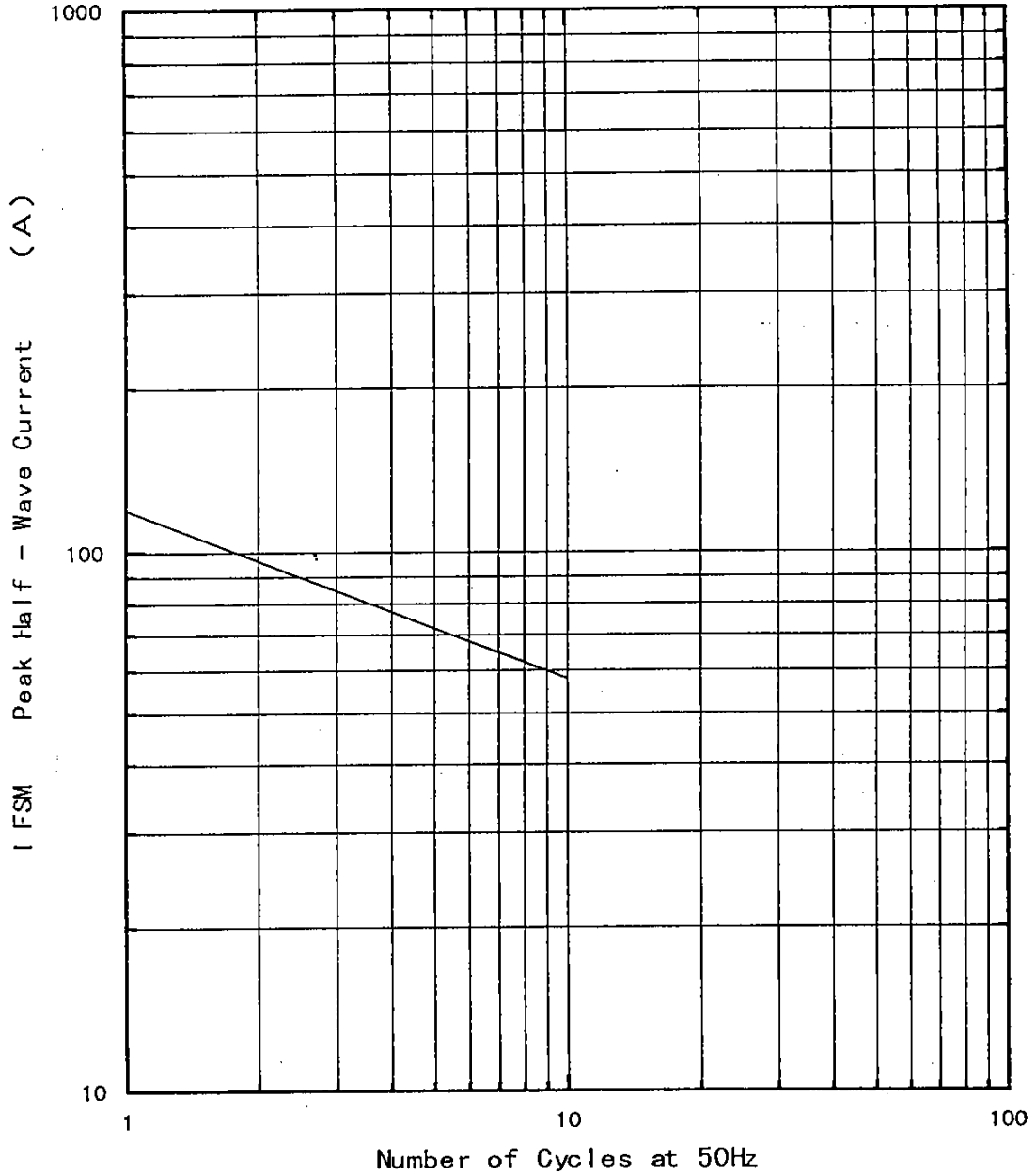
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Surge Capability



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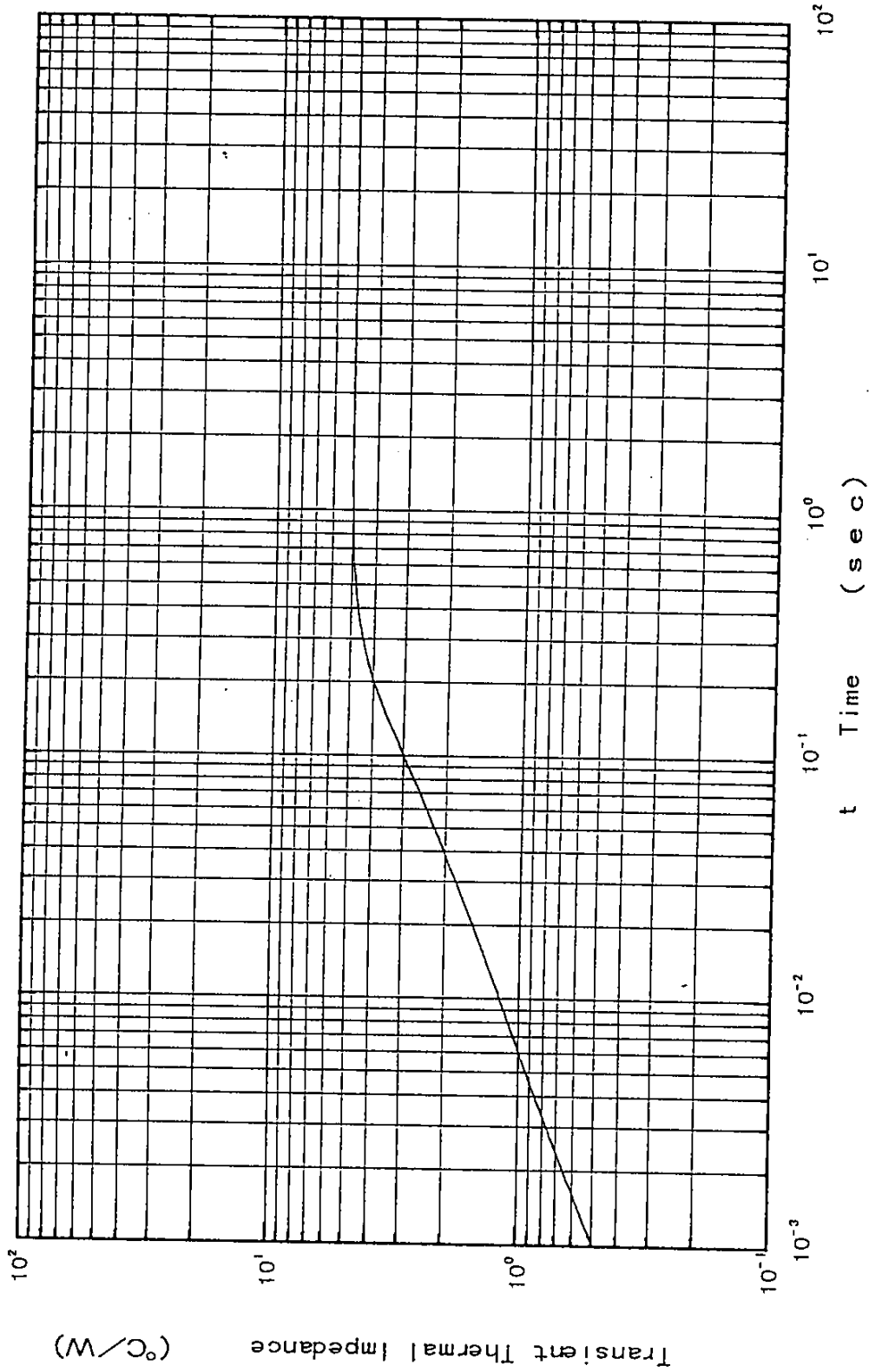
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Transient Thermal Impedance



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