

# SPECIFICATION

Device Name : SILICON DIODE

Type Name : YG811S09R

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 YG811S09R

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	$V_{RSM}$	tw=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 $T_c=116^{\circ}C$	5	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	$^{\circ}C$

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	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

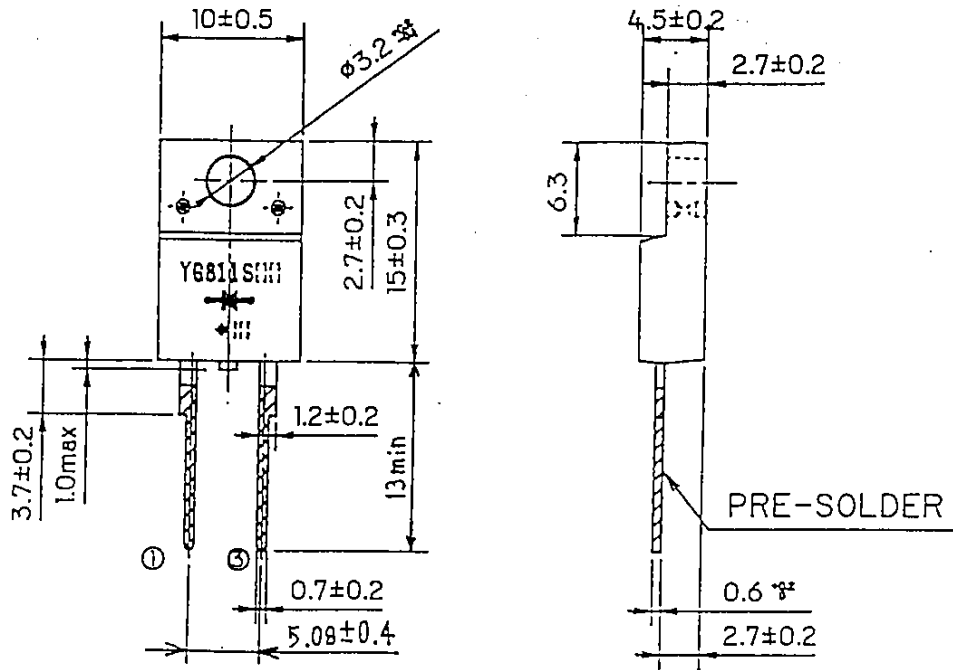
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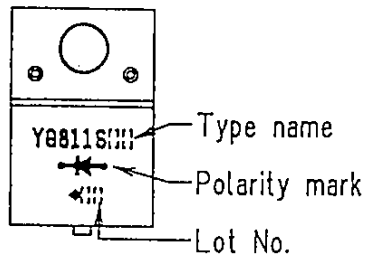
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OUT VIEW



DIMENSIONS ARE IN MILLIMETERS.

MARKING



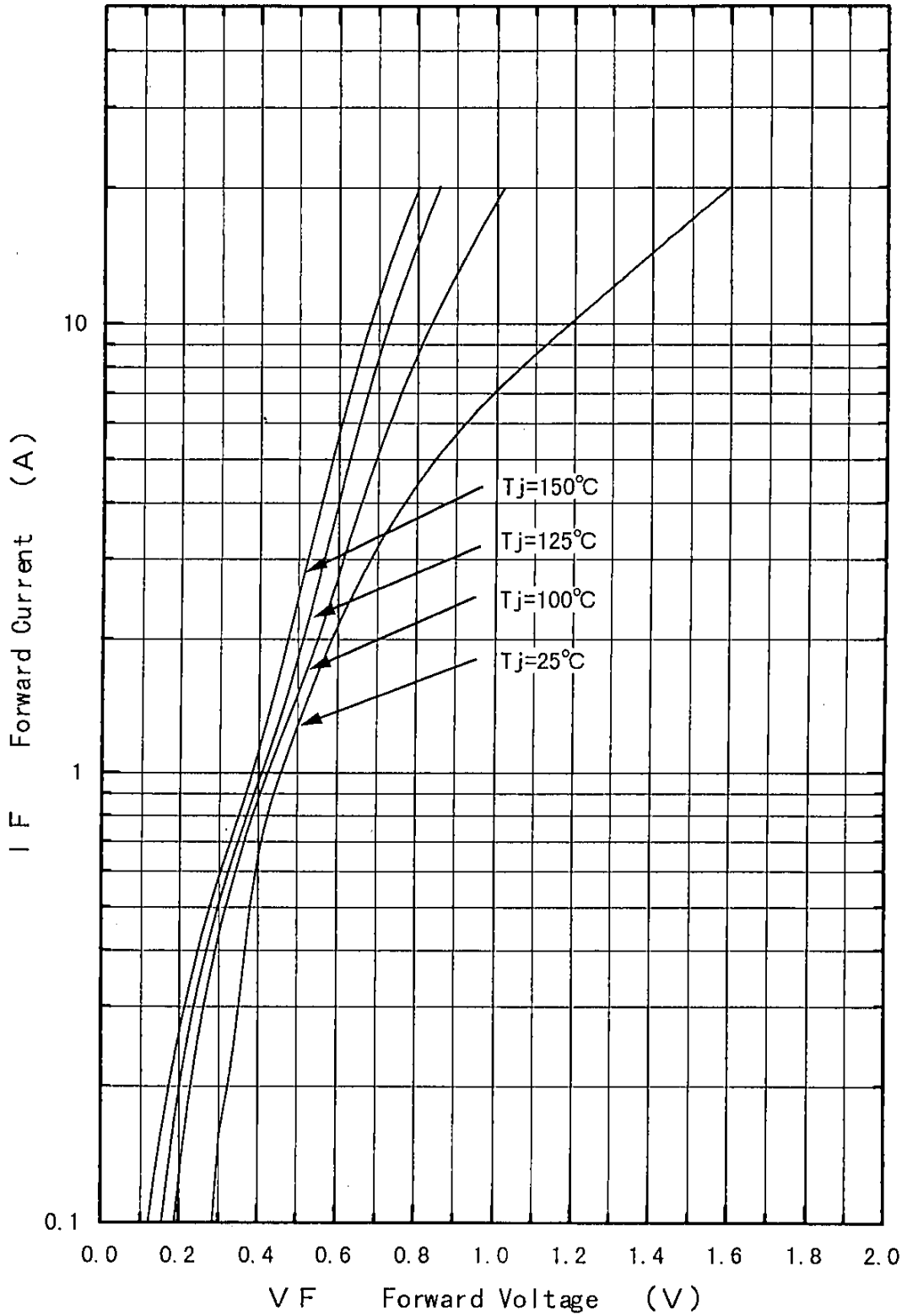
CONNECTION



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# Forward Characteristic (typ.)



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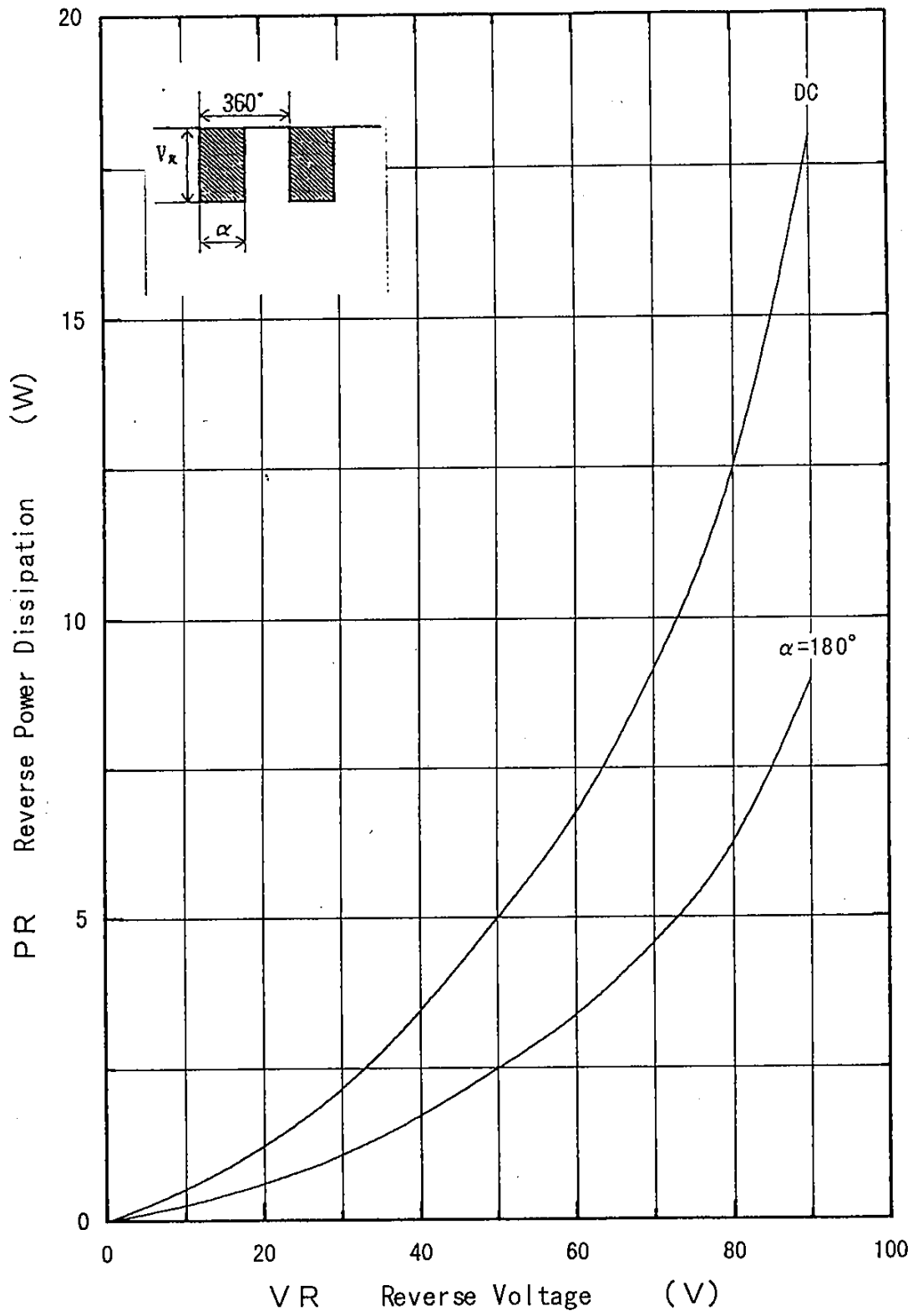
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# Reverse Power Dissipation



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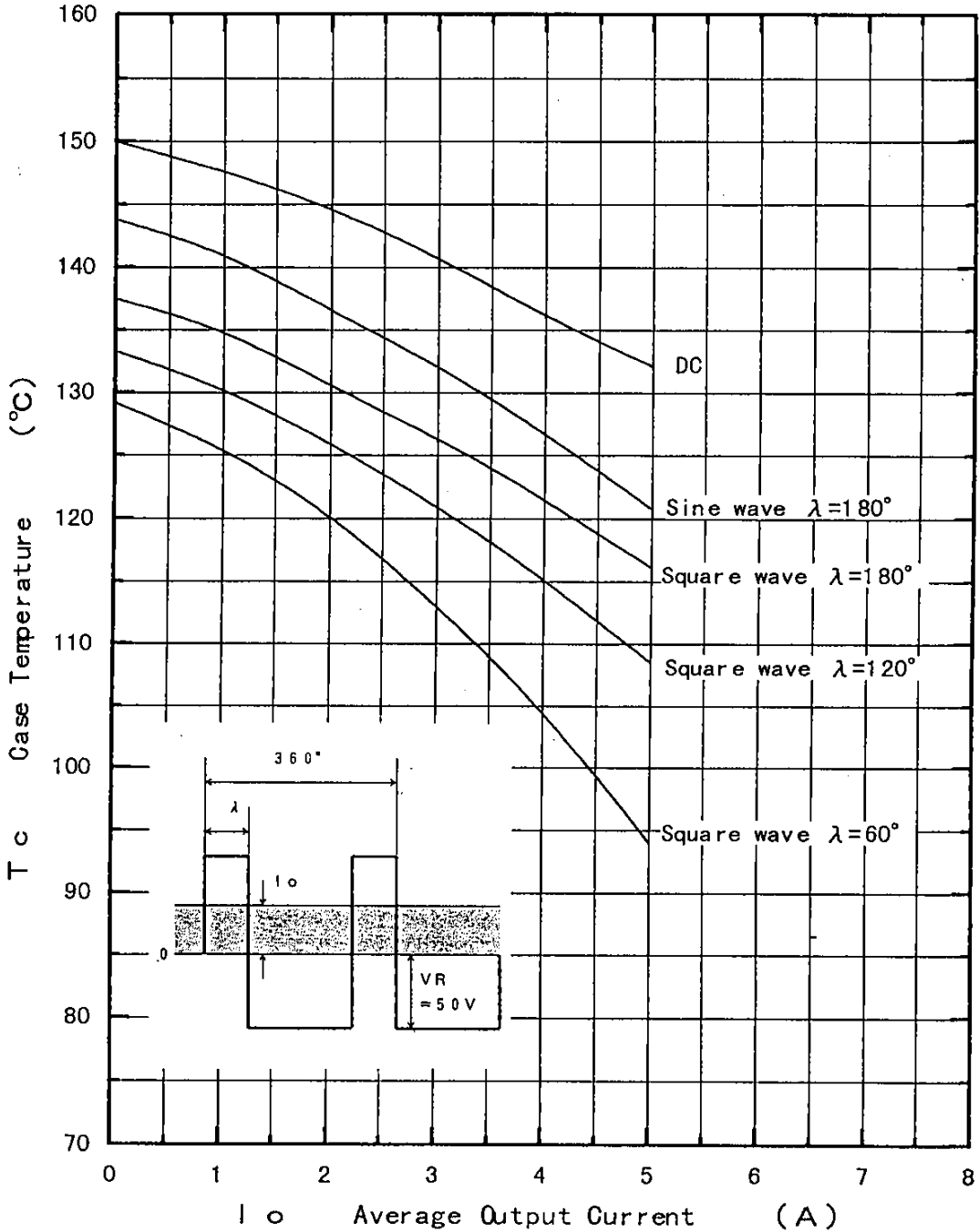
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### Current Derating (Io-Tc)



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

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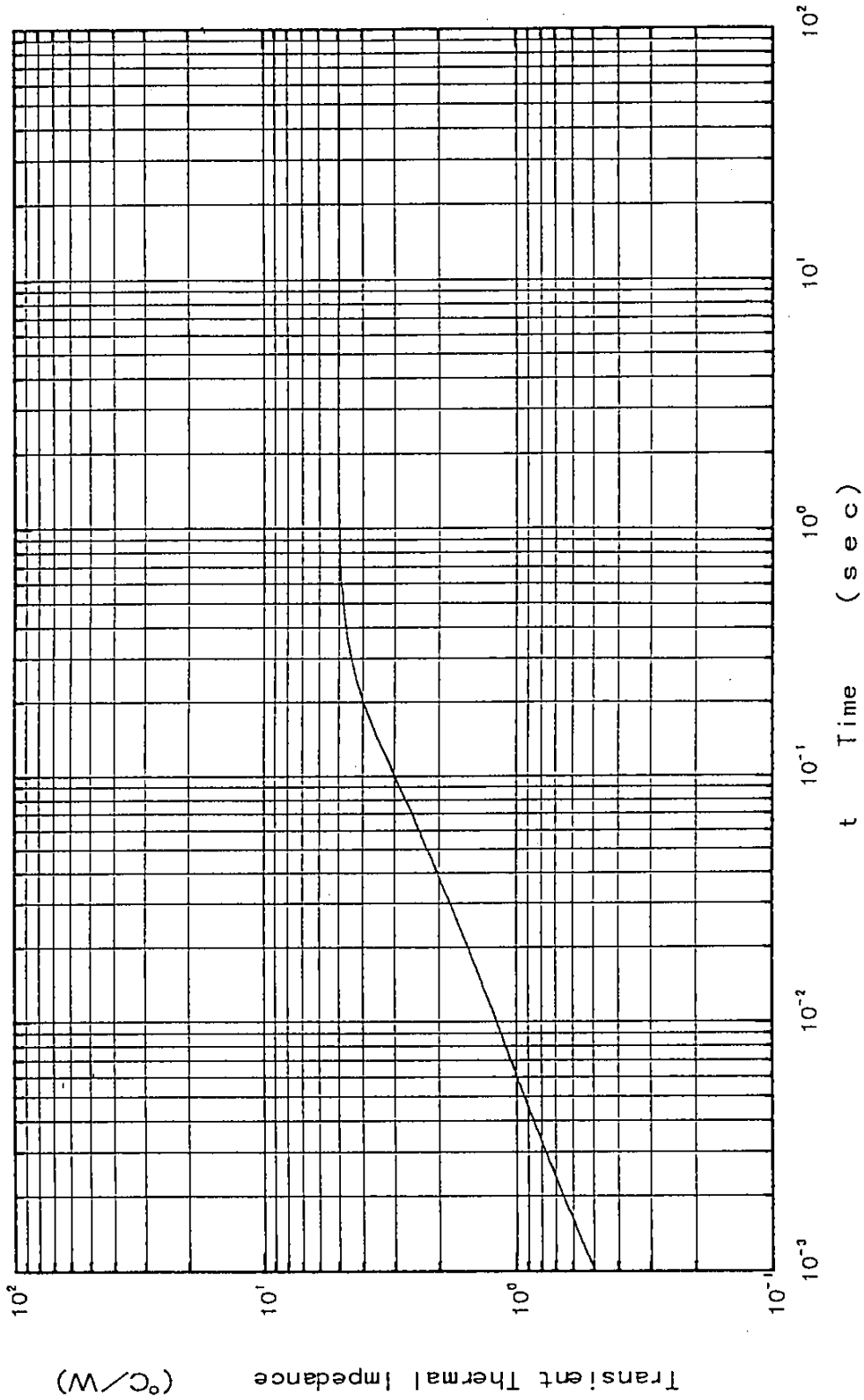
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### Transient Thermal Impedance



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