

SPECIFICATION

Device Name : SILICON DIODE

Type Name : YG805C04R

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 YG805C04R

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	48	V
Repetitive peak reverse voltage	V_{RRM}		40	V
Isolating voltage	Viso	Terminals-to-Case, AC, 1min	1500	V
Average forward current	I_o	Square wave duty=1/2 $T_c=100^{\circ}C$	20 *	A
Non-repetitive surge current	I_{FSM}	Sine wave, 10ms	120	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	$I_F = 10 A$	0.6	V
Reverse current **	I_R	$V_R = V_{RRM}$	15	mA
Thermal resistance	$R_{th(j-c)}$	Junction to case	2.5	$^{\circ}C/W$

** Rating per element

3.3 MECHANICAL CHARACTERISTICS

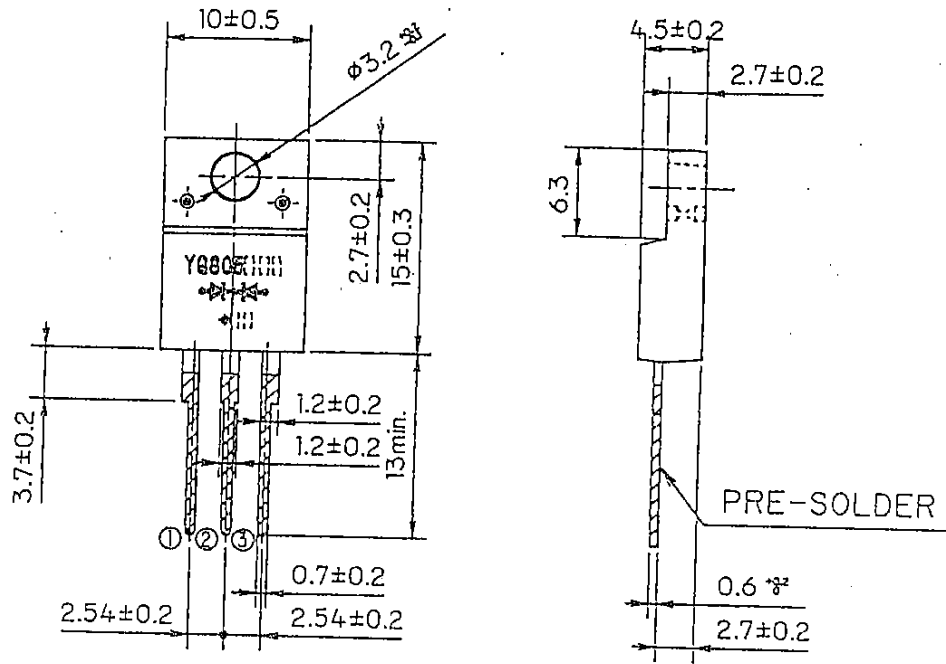
Mounting torque	Recommended torque	0.3 ~ 0.5	N · m
Weight		2.0	g

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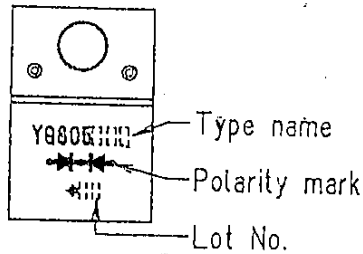
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OUT VIEW



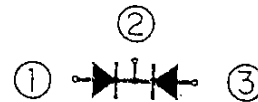
DIMENSIONS ARE IN MILLIMETERS.

MARKING



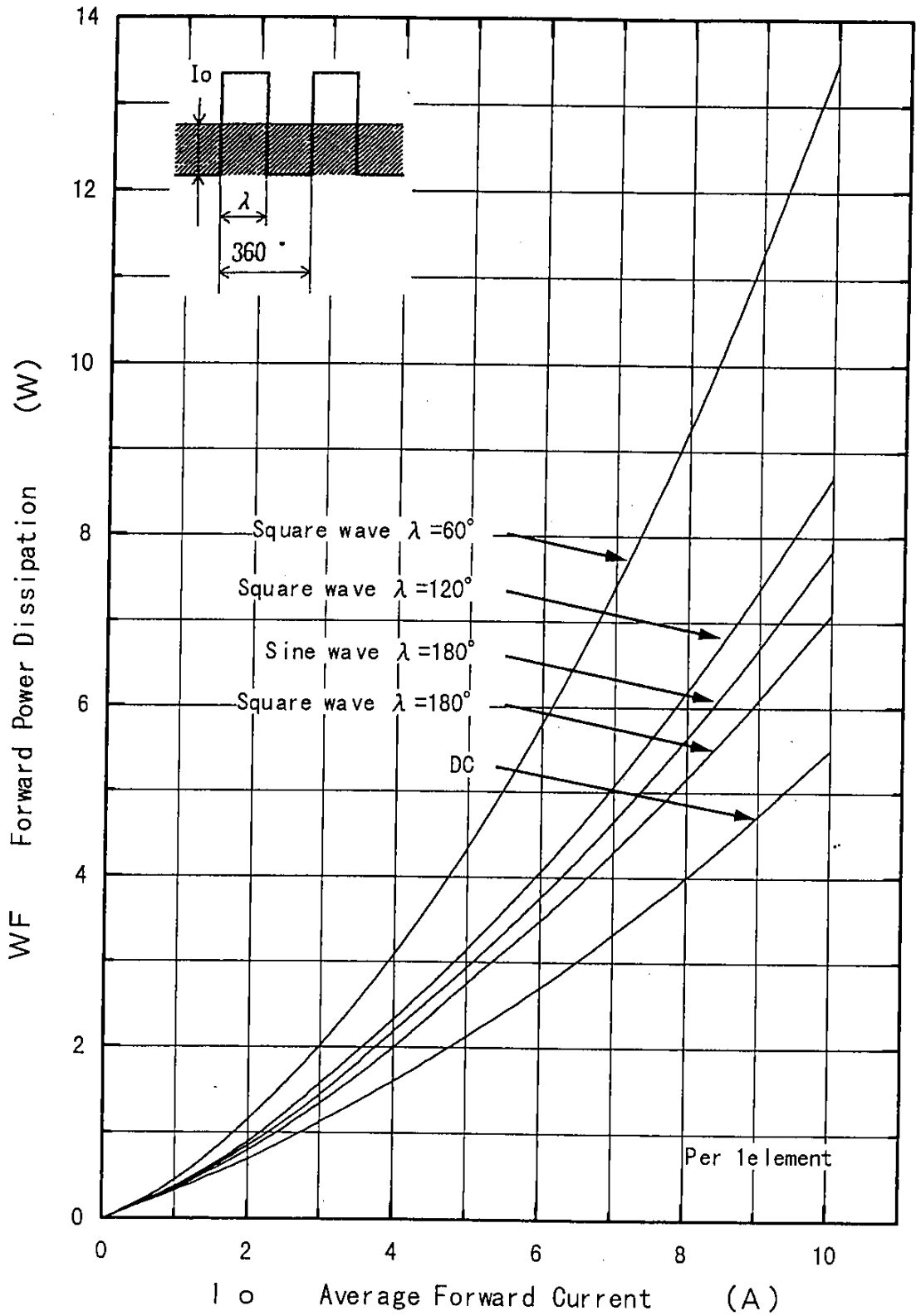
CONNECTION

YG805C $\overline{\text{III}}$ R



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Forward Power Dissipation



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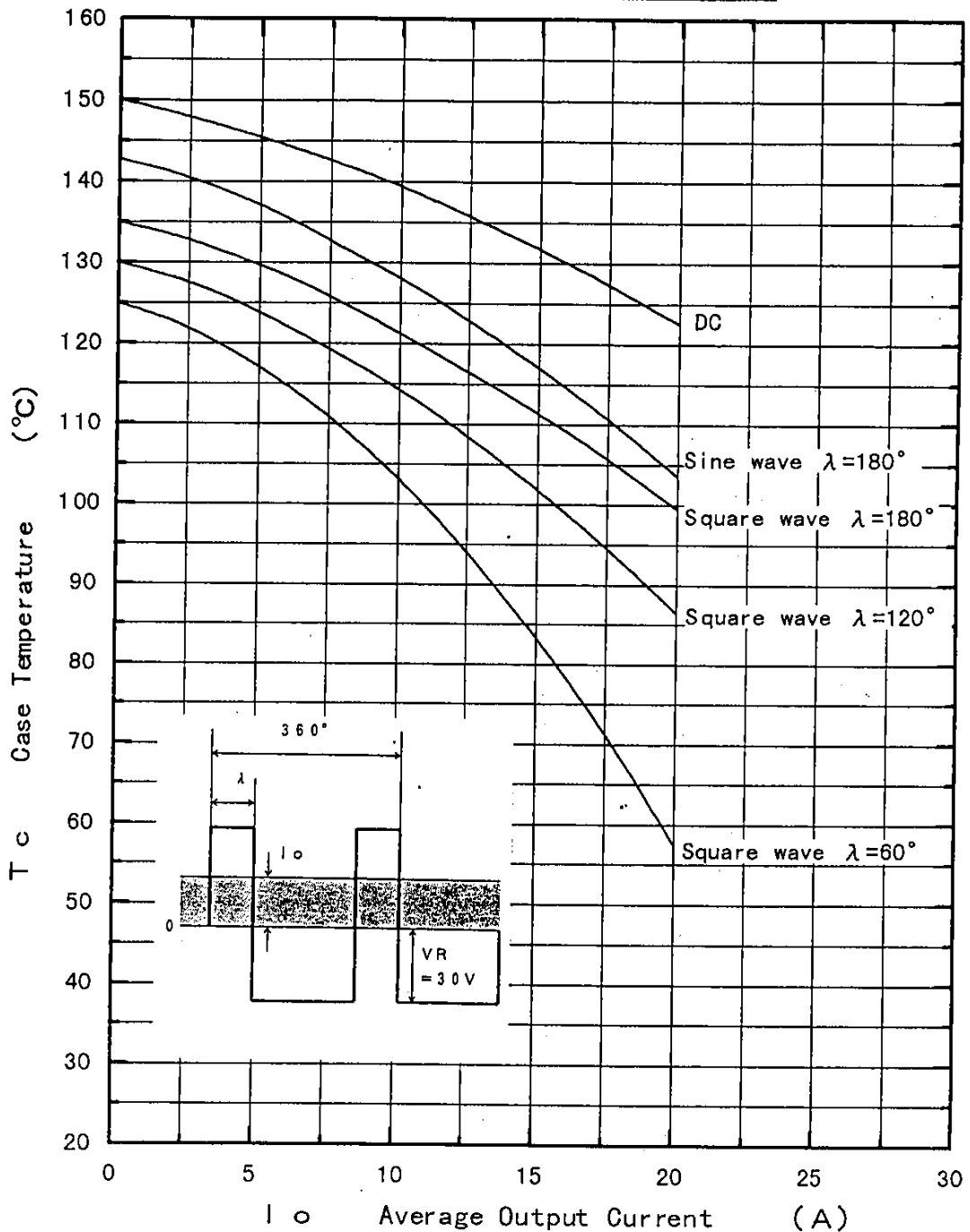
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Current Derating (Io-Tc)



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

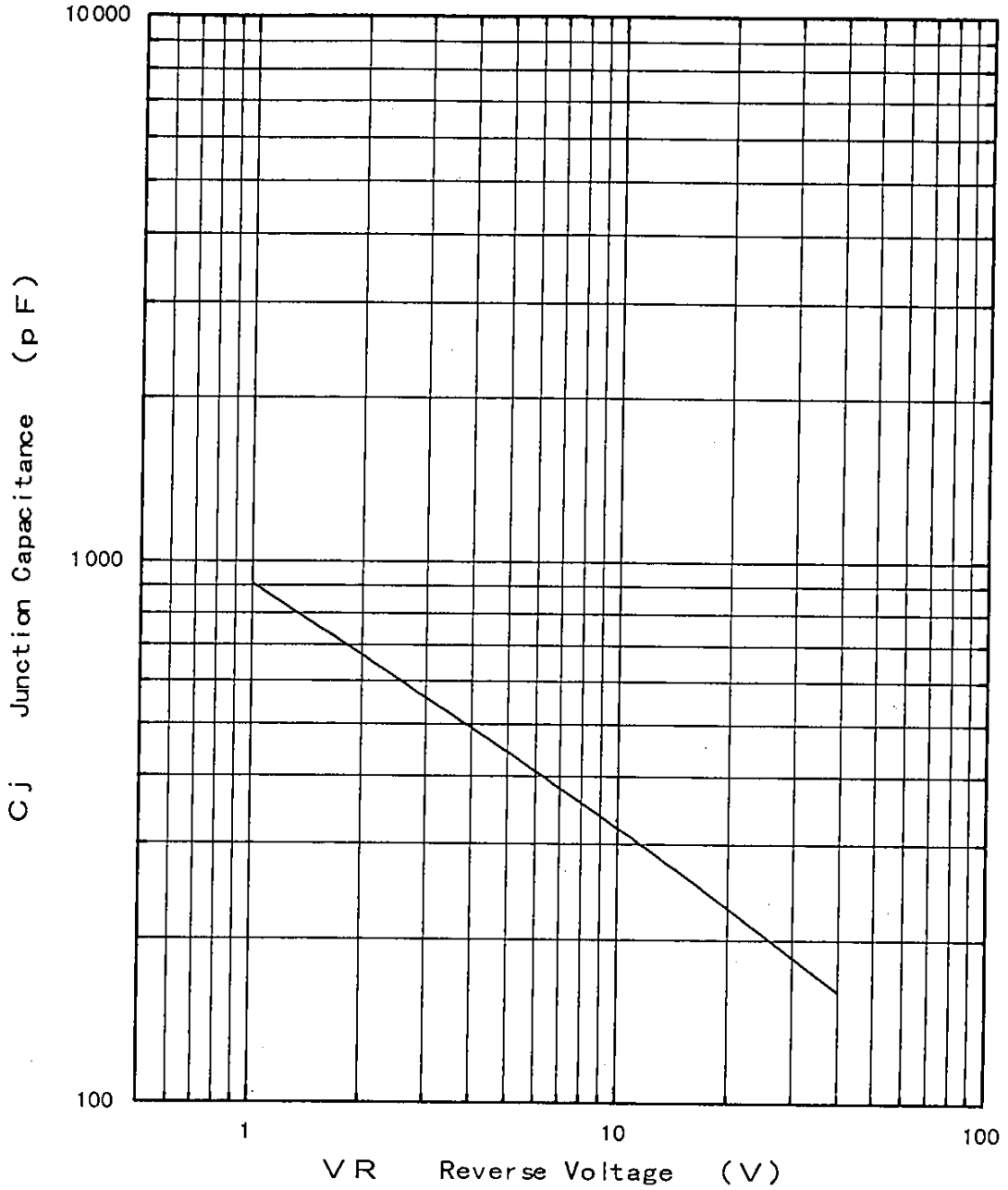
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Junction Capacitance Characteristic (typ.)



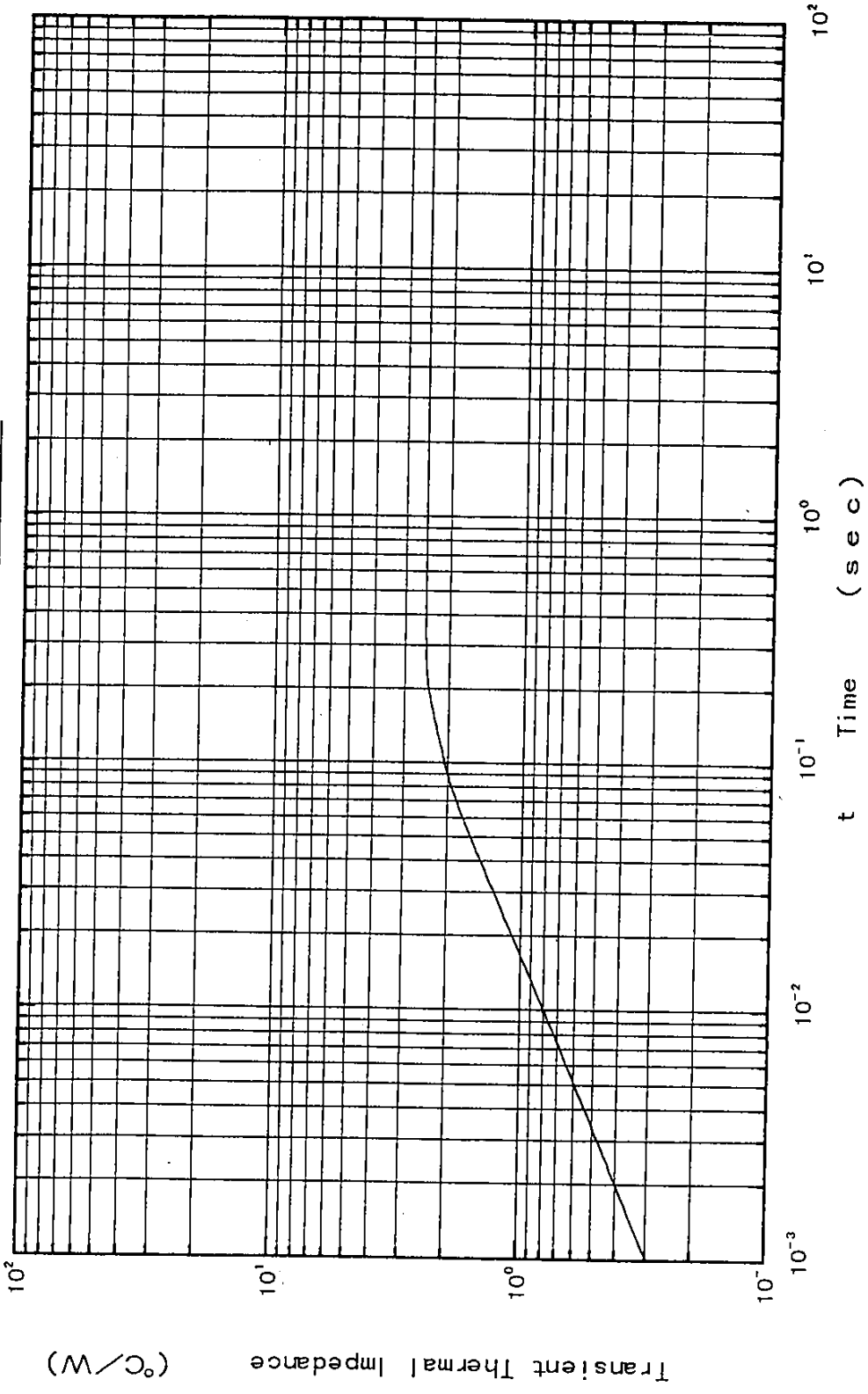
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Transient Thermal Impedance



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