

SPECIFICATION

DEVICE NAME : BIPOLAR TRANSISTOR

TYPE NAME : 2SC4603R

SPEC. No. :

DATE :

Fuji Electric Co.,Ltd.

This Specification is subject to change without notice.

	DATE	NAME	APPROVED	Fuji Electric Co.,Ltd.	
DRAWN				DWG.NO.	
CHECKED					

Ratings and Characteristics of Fuji Power Transistor

2 S C 4 6 0 3 R

1. Outline Drawing : To-3PF
2. Absolute Maximum Ratings (Tc=25°C)

Item	Symbol	Maximum Rating	Unit
Collector-Base Voltage	VCBO	9 0 0	V
Collector-Emitter Voltage	VCEO	8 0 0	
Emitter-Base Voltage	VEBO	1 0	
Collector Current	IC	3	A
Base Current	IB	1	
Collector Dissipation	PC	8 0	W
Operating Temperature	Tj	+ 1 5 0	°C
Storage Temperature	Tstg	- 5 5 ~ + 1 5 0	

3. Electrical Characteristics (Tc=25°C)

Items	Symbol	Conditions	Min	Max	Unit
Collector-Base Voltage	VCBO	ICBO = 1mA	900		V
Collector-Emitter Voltage	VCEO	ICEO = 10mA	800		
Emitter-Base Voltage	VEBO	IEBO = 1mA	10		
Collector Cutoff Current	ICBO	VCB = 900V		1.0	mA
Emitter Cutoff Current	IEBO	VEBO = 10V		1.0	
DC Current Gain	hFE	IC=1A, VCE=5V	10		
Collector Saturation Voltage	VCE(sat)	IC = 1A, IB = 0.2A		1.0	V
Emitter Saturation Voltage	VBE(sat)			1.5	
Switching Time	ton	IC = 2A, Duty ≤ 2% IB1 = +0.4A, IB2 = -0.8A, PW = 20 μs, RL = 150Ω		1.0	μs
	tstg			4.0	
	tf			0.8	

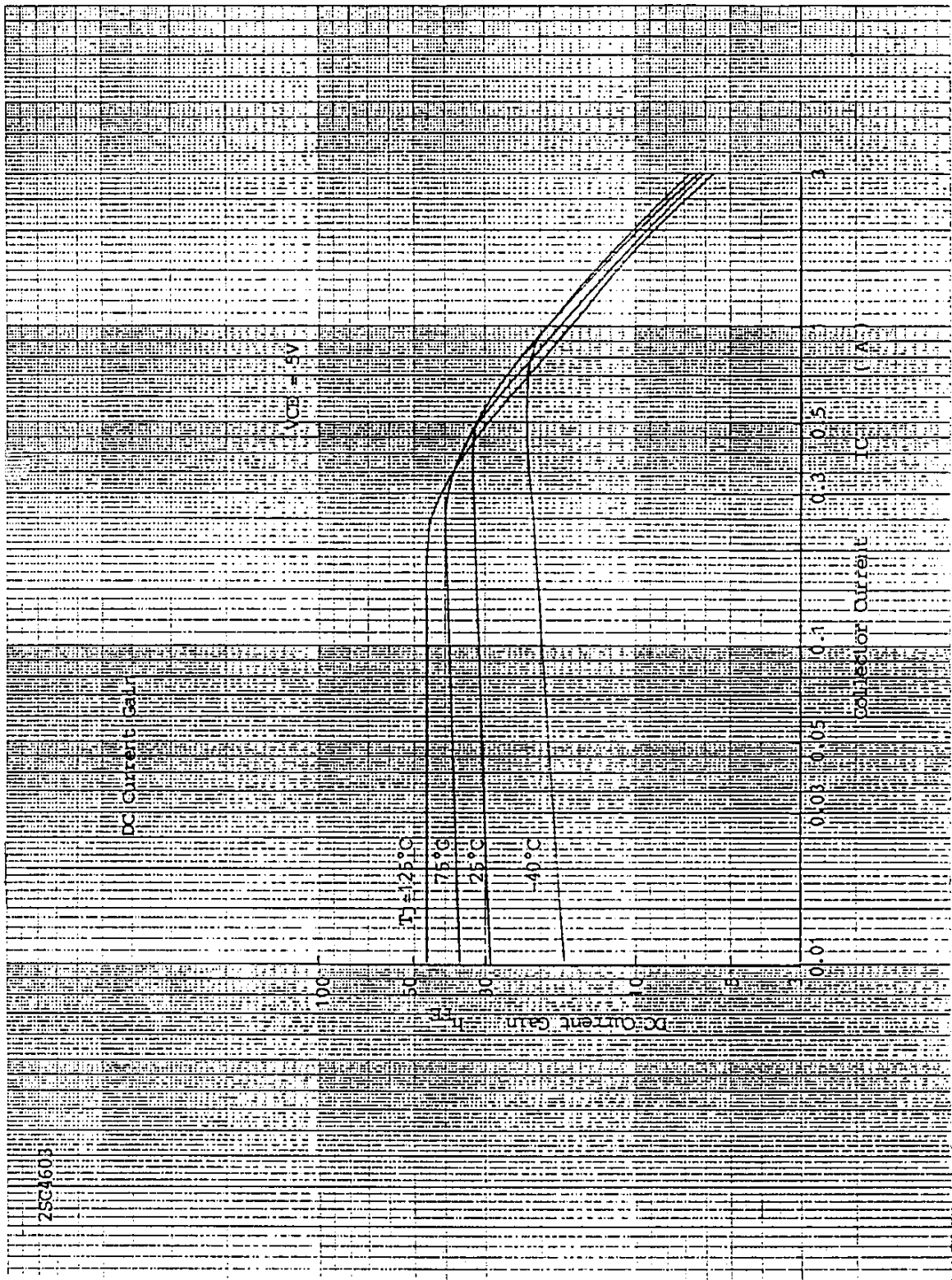
4. Thermal Characteristics

Item	Symbol	Conditions	Min	Max	Unit
Thermal Resistance	Rth(j-c)	Junction to Case		1.55	°C/W

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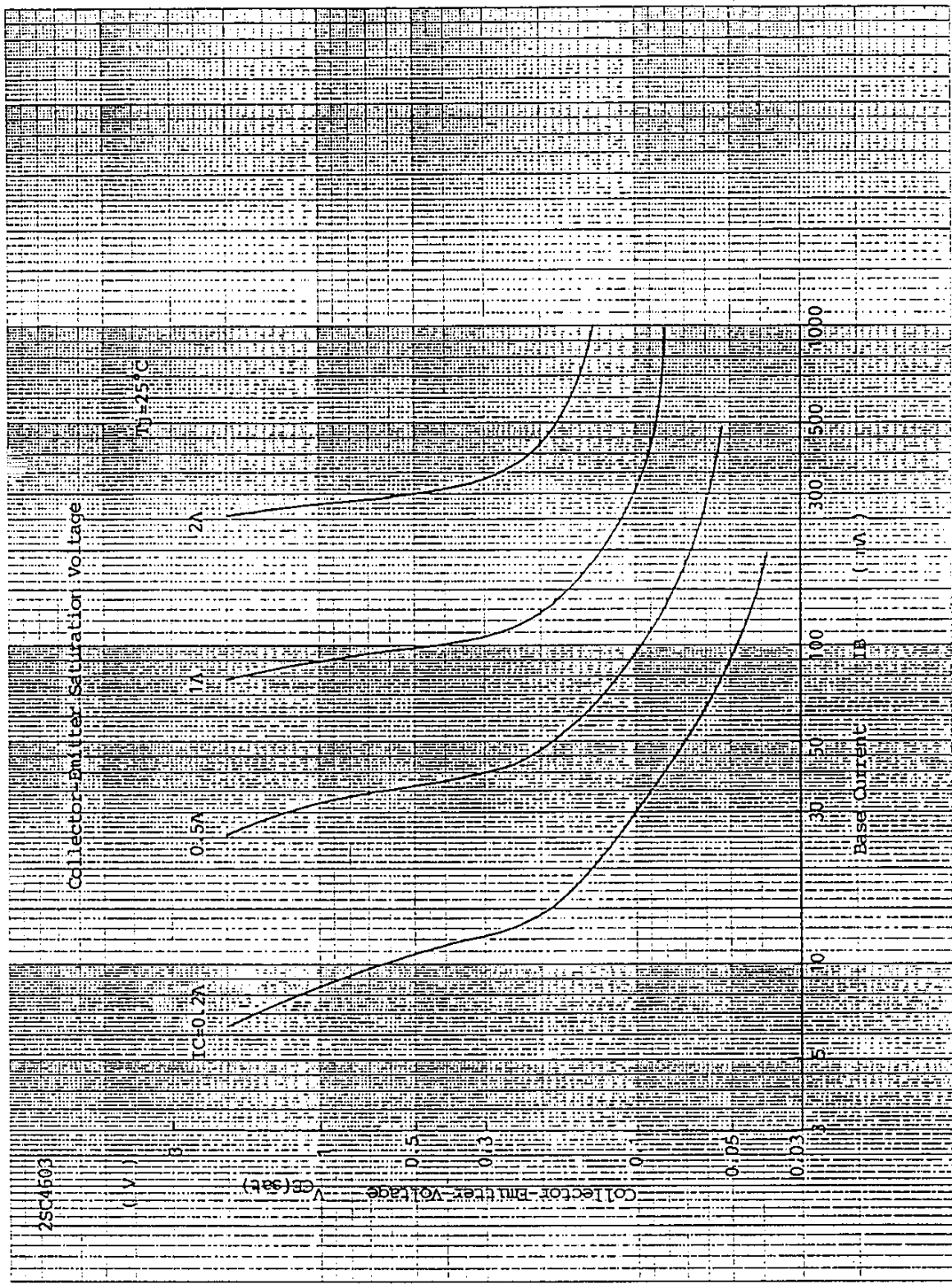


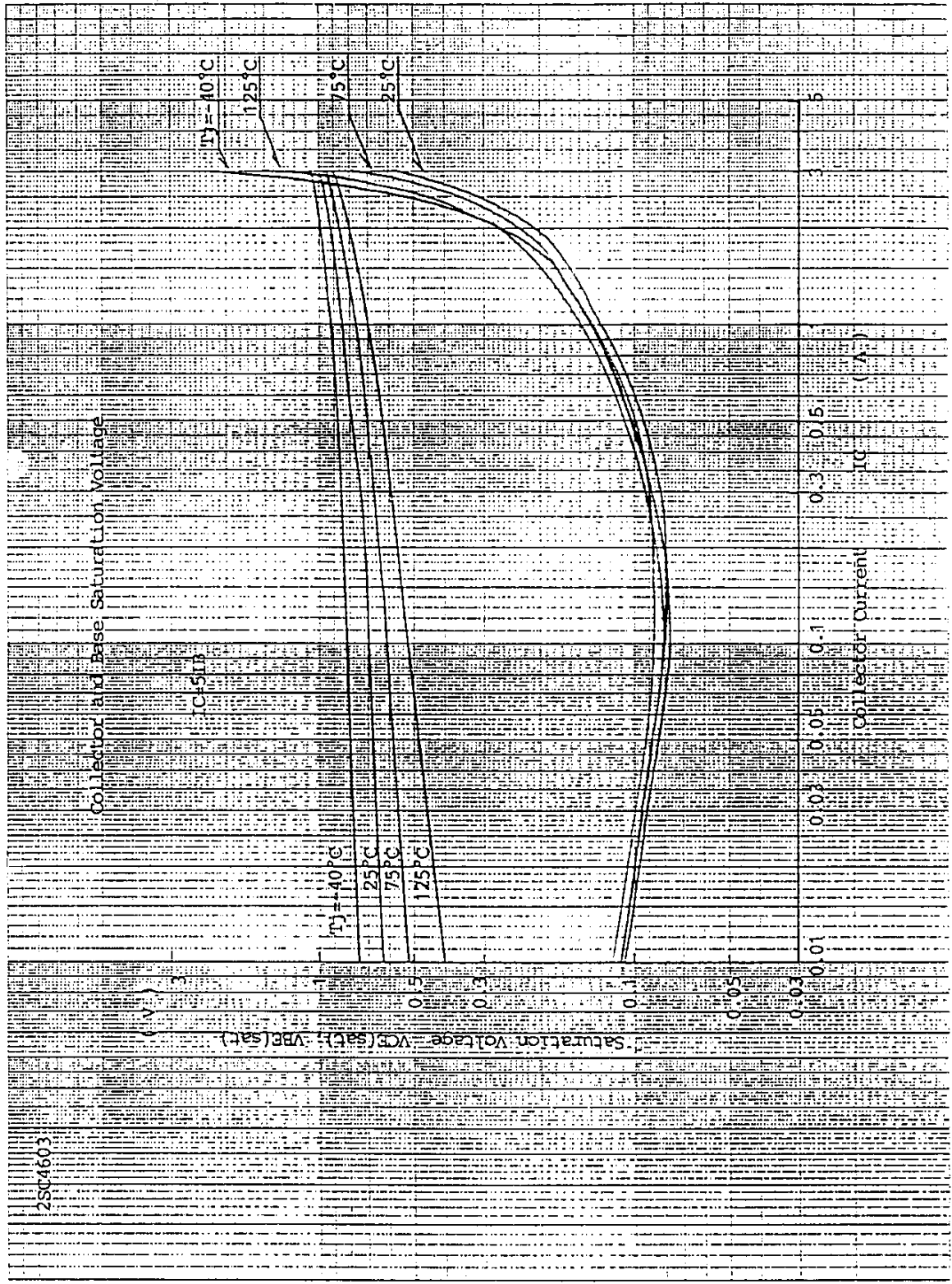
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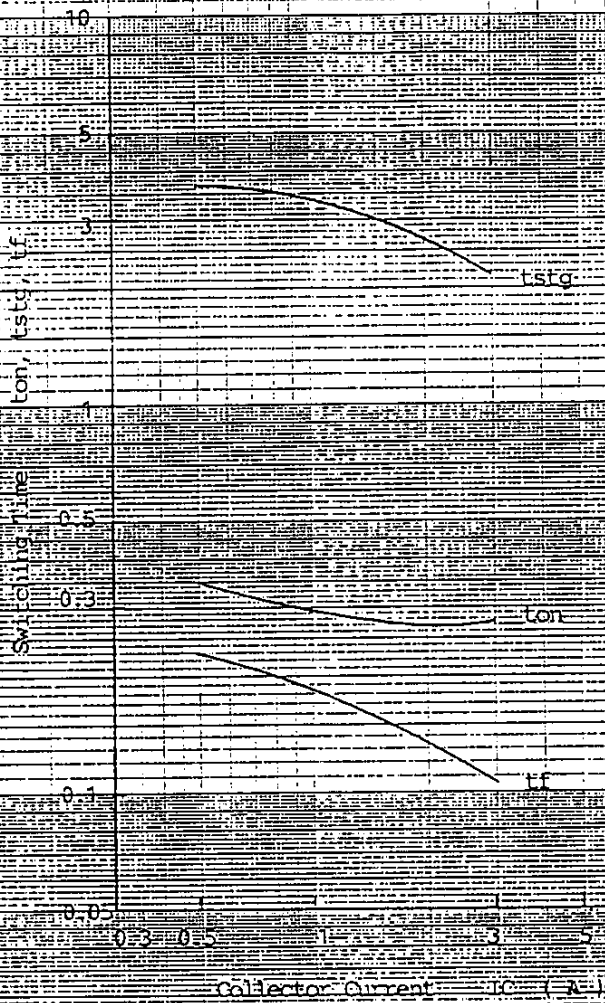




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Switching Time

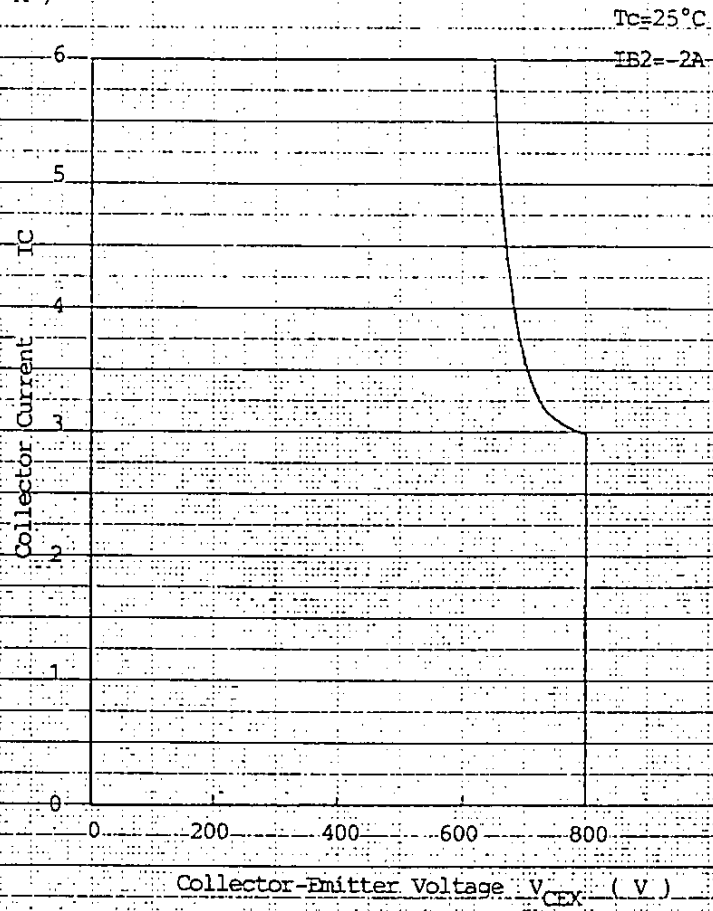
(μ sec)



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Reverse Biased Safe Operating Area

(-A-)



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forward-Biased Safe-Operating-Area

(A.)

10

I_C

Collector Current

0.1

0.05

DC

$t_w = 1ms$

100 μs

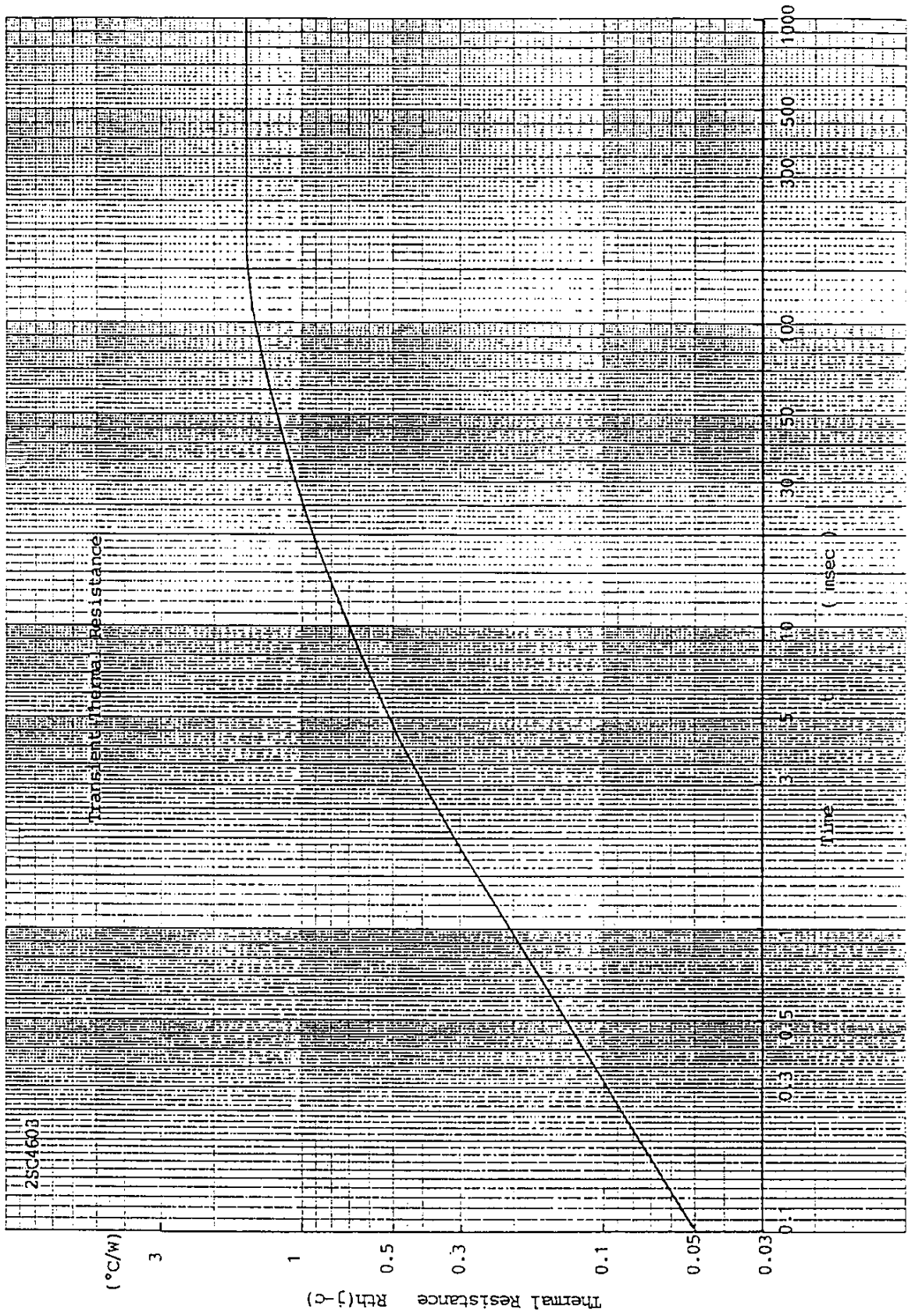
10 μs

$T_c = 25^\circ C$

Non-Repetitive

Single-Pulse

Collector-Emitter Voltage V_{CE} (V)



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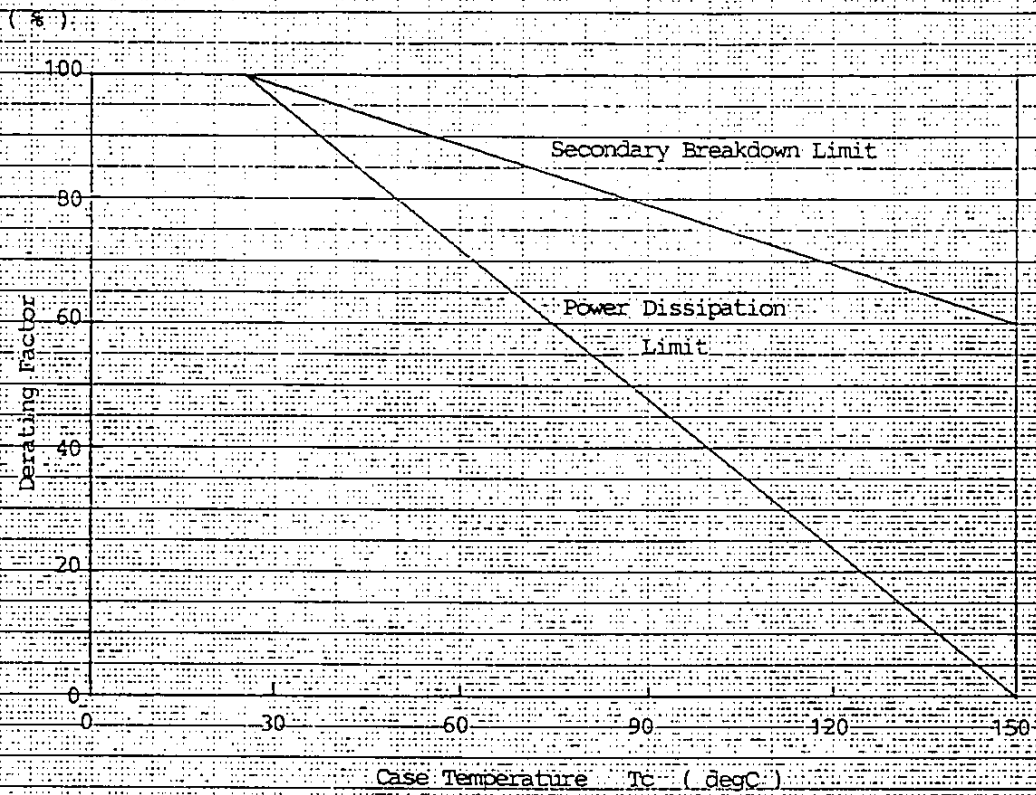
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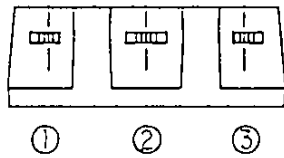
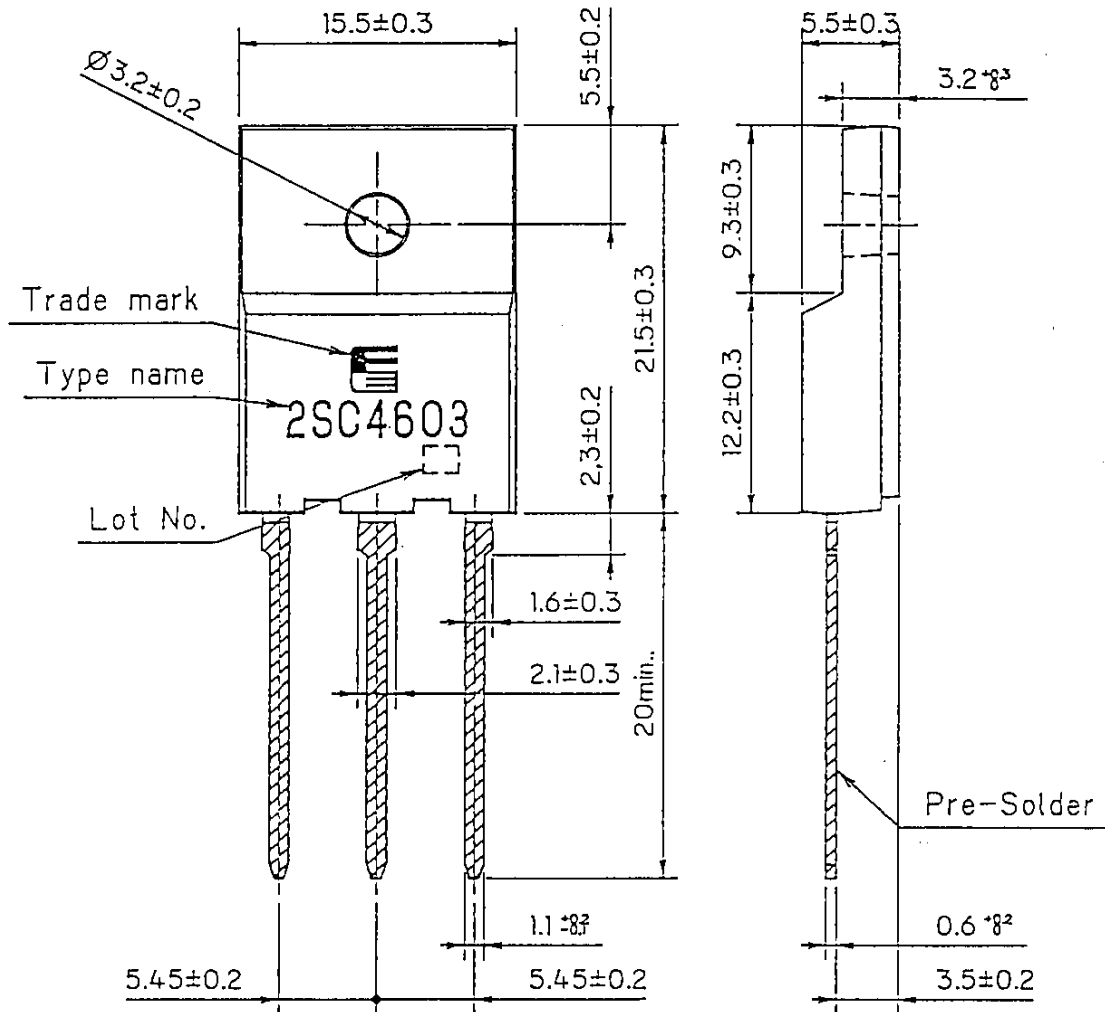
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Power Derating Factor



FUJI POWER TRANSISTOR
TYPE : 2SC4603R



CONNECTION

- ① BASE
- ② COLLECTOR
- ③ EMITTER