

SPECIFICATION

DEVICE NAME : BIPOLAR TRANSISTOR

TYPE NAME : ET393R

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.	1/8
CHECKED					

Ratings and Characteristics of Fuji Power Transistor

ET393R

1. Outline Drawings TO-3PF

2. Absolute Maximum Ratings (Tj=25°C)

Item	Symbols	Maximum Ratings	Units
Collector-Base Voltage	V_{CBO}	150	V
Collector-Emitter Voltage	V_{CEO}	100	
Emitter-Base Voltage	V_{EBO}	6	
Collector Current (Continuous)	I_C	10	A
Base Current (Continuous)	I_B	1	
Collector Power Dissipation	P_C	80	W
Operating Temperature	T_j	+150	°C
Storage Temperature	T_{stg}	-55 ~ +150	

3. Electrical Characteristics (Tj=25°C)

Item	Symbols	Conditions	Min	Max	Unit
Collector-Base Breakdown Voltage	BV_{CBO}	$I_{CBO} = 1mA$	150		V
Collector-Emitter Voltage	$V_{CEO(SUS)}$	$I_{CBO} = 10mA$	100		
Emitter-Base Breakdown Voltage	V_{EBO}	$I_{EBO} = 1mA$	6		
Collector Cutoff Current	I_{CBO}	$V_{CBO} = 150V$		1.0	mA
Emitter Cutoff Current	I_{EBO}	$V_{EBO} = 6V$		1.0	
DC Current Gain	h_{FE}	$I_C = 3A \quad V_{CE} = 4V$	700		
Collector Saturation Voltage	$V_{CE(SAT)}$	$I_C = 1.5A$		1.5	V
Base Saturation Voltage	$V_{BE(SAT)}$	$I_B = 50mA$		2.0	

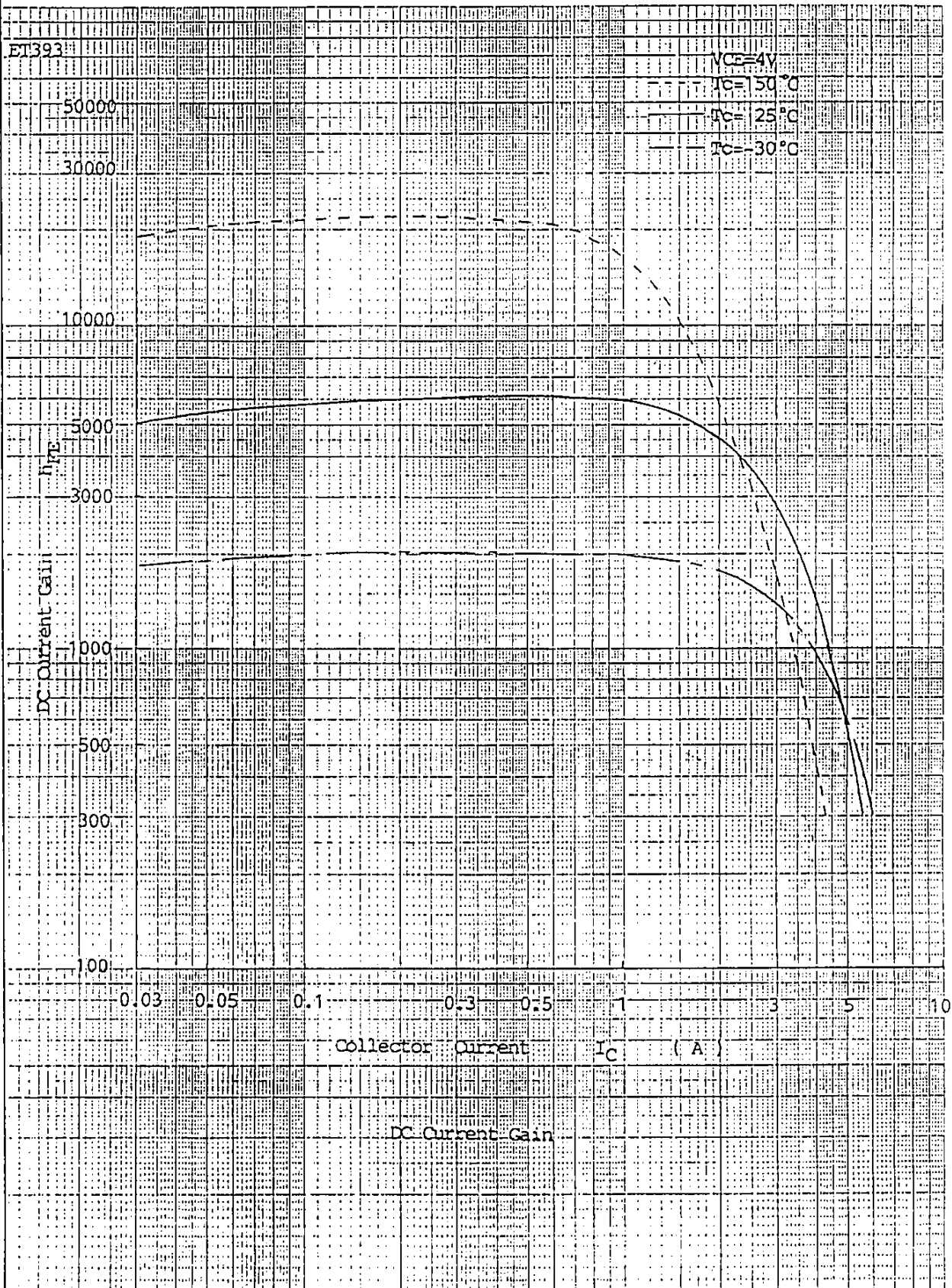
4. Thermal Characteristics

Item	Symbols	Conditions	Min	Max	Unit
Thermal Resistance	$R_{\theta(j-c)}$	Junction to Case		1.55	°C/W

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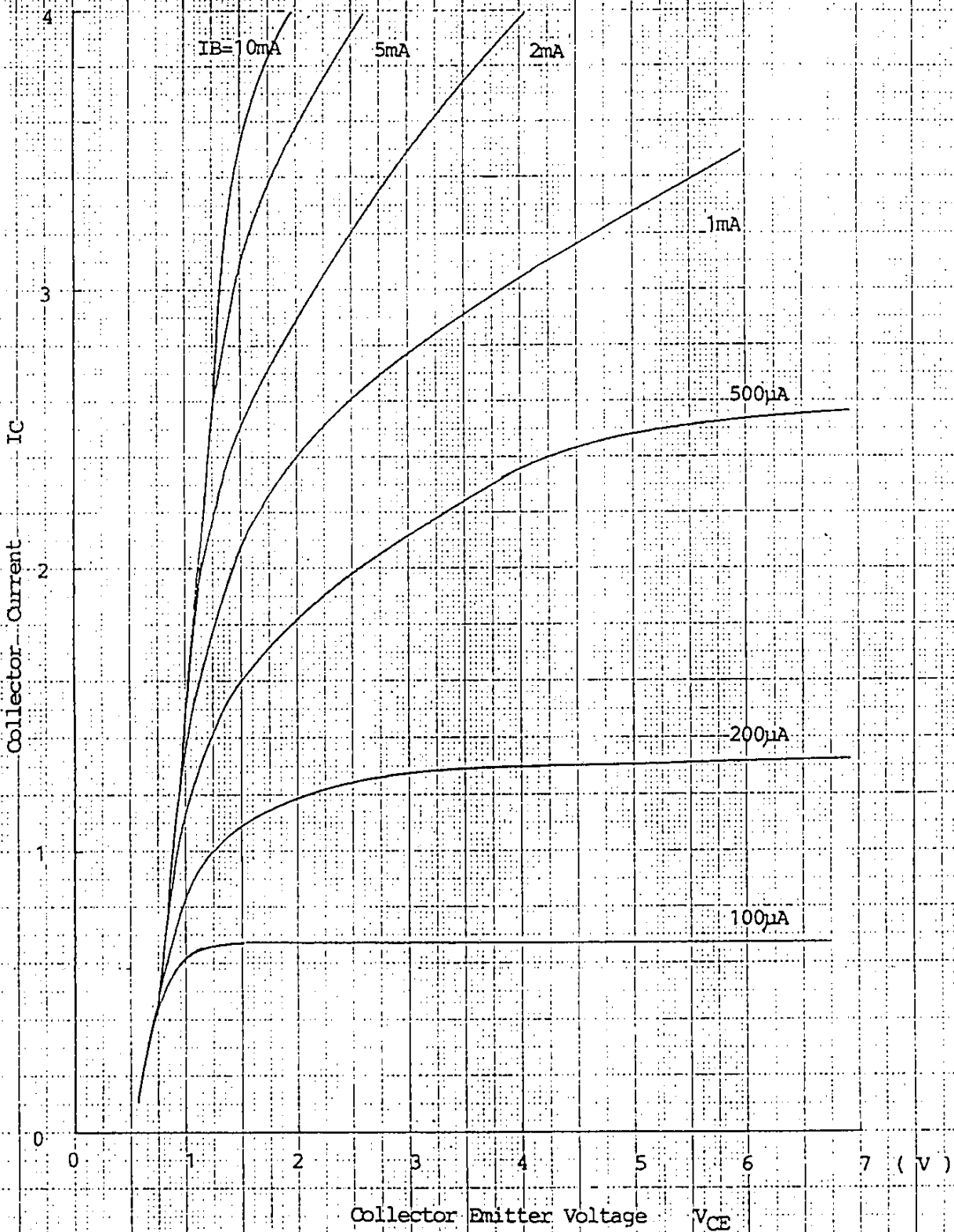
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ST393

Collector Output Characteristics

(A)



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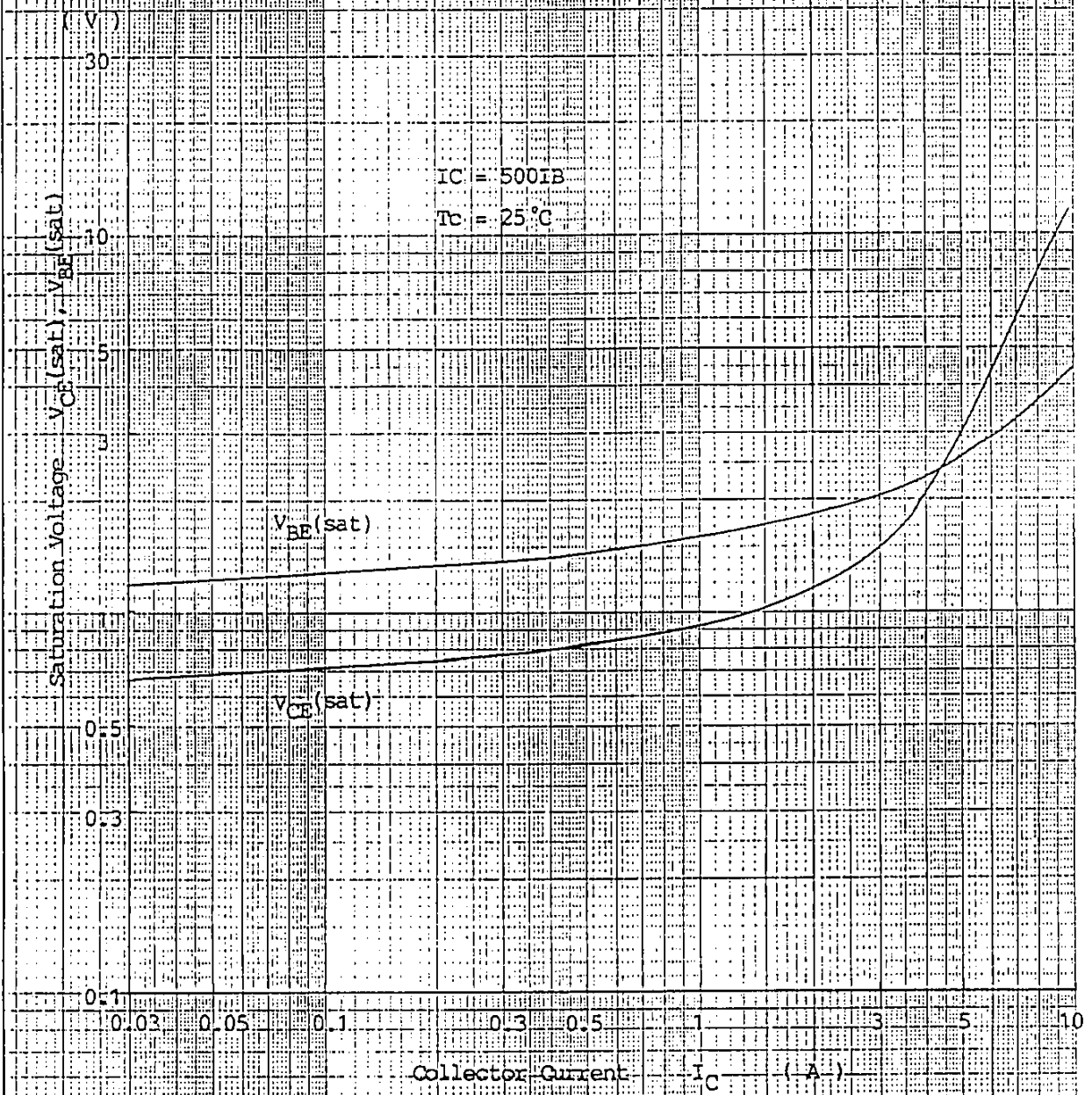
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Collector and Base Saturation Voltage



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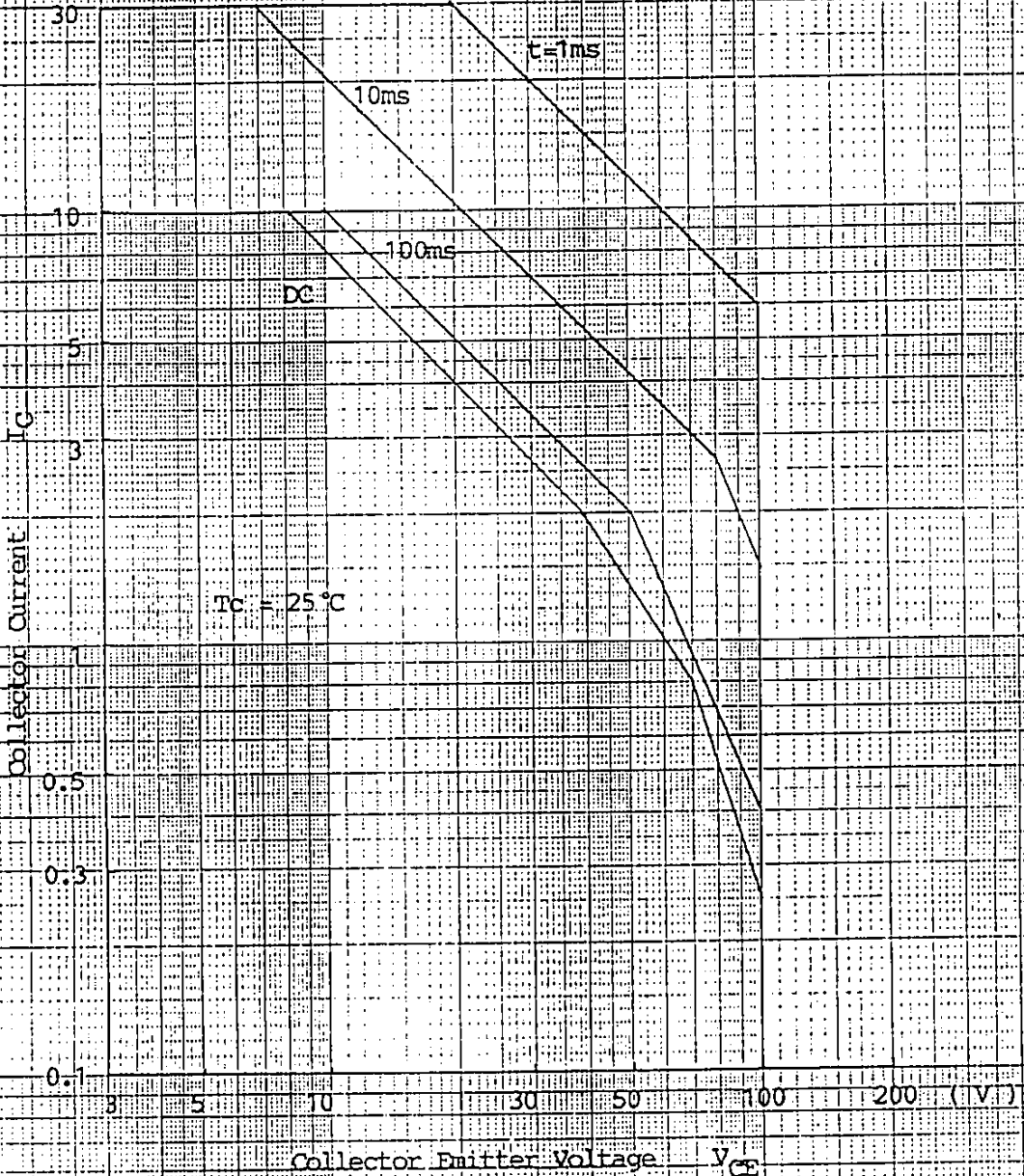
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(A)



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ET393

Transient Thermal Impedance

$\theta_{C/w}$
5.0
2.0
2.0
1.0
0.5
0.2
0.1
0.05
0.02

Thermal Resistance
 $R_{th}(j-c)$

1000
500
200
100
50
20
10
5.0
2.0
1.0
0.5

Time : T (msec)

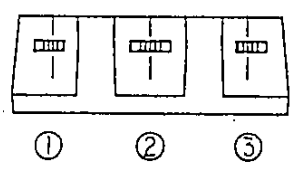
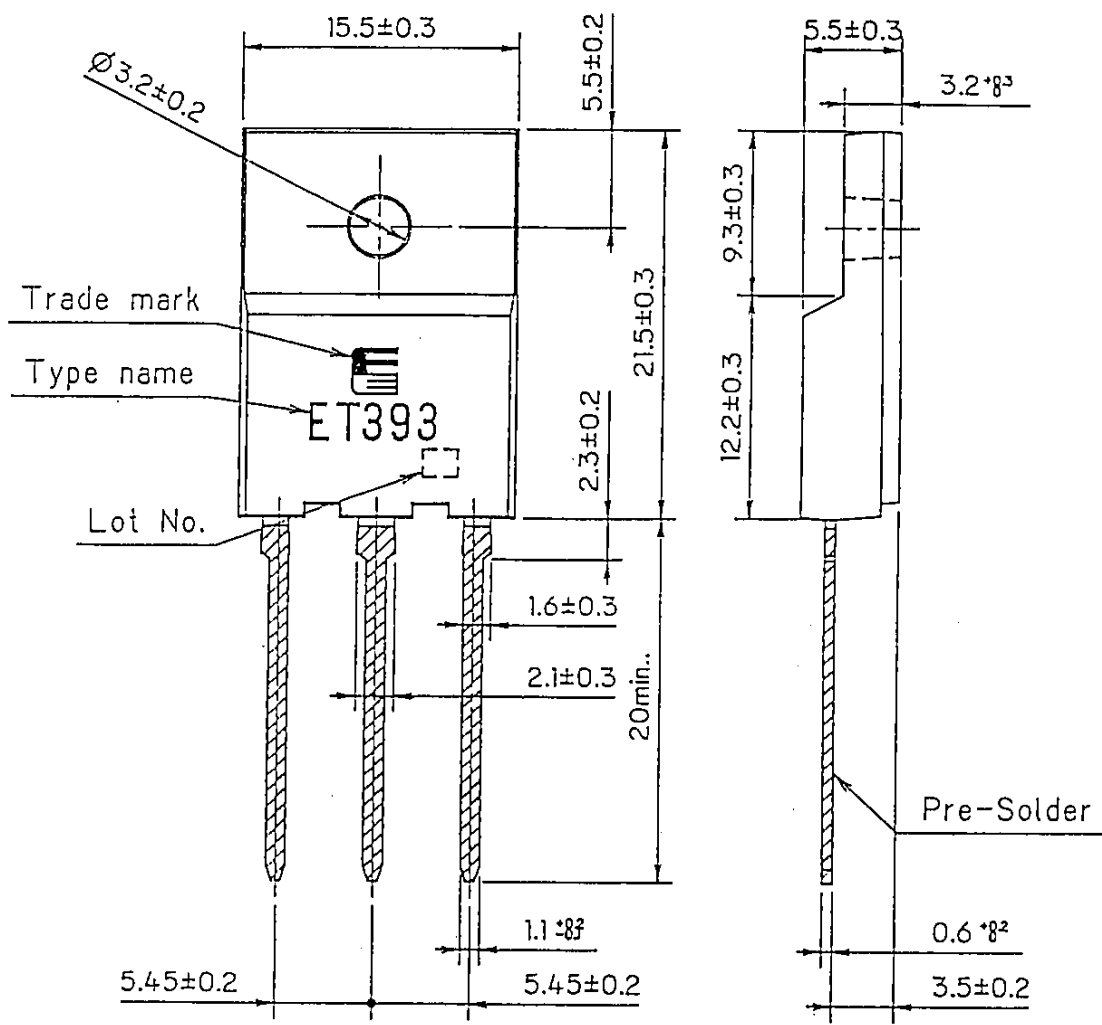
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FUJI POWER TRANSISTOR
TYPE : ET393R



CONNECTION

- ① BASE
- ② COLLECTOR
- ③ EMITTER

DIMENSIONS ARE IN MILLIMETERS.

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