

# SEMICONDUCTOR

## TOSHIBA

TECHNICAL DATA

### TOSHIBA TRANSISTOR

## 2SA1302

SILICON PNP TRIPLE DIFFUSED TYPE

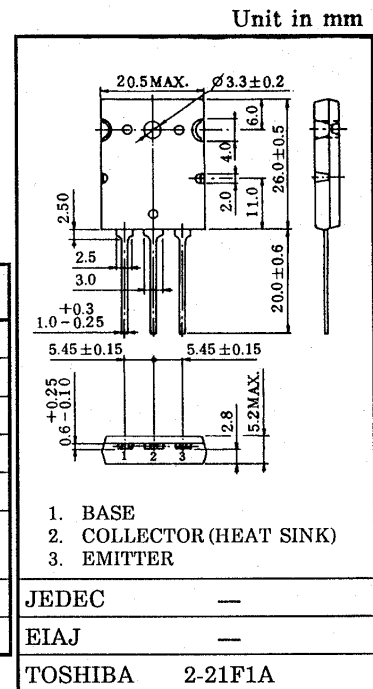
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**POWER AMPLIFIER APPLICATIONS.**

- Complementary to 2SC3281
- Recommend for 100W High Fidelity Audio Frequency Amplifier Output Stage.

**MAXIMUM RATINGS (Ta = 25°C)**

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	V <sub>CB0</sub>	-200	V
Collector-Emitter Voltage	V <sub>CEO</sub>	-200	V
Emitter-Base Voltage	V <sub>EB0</sub>	-5	V
Collector Current	I <sub>C</sub>	-15	A
Base Current	I <sub>B</sub>	-1.5	A
Collector Power Dissipation (T <sub>c</sub> = 25°C)	P <sub>C</sub>	150	W
Junction Temperature	T <sub>j</sub>	150	°C
Storage Temperature Range	T <sub>stg</sub>	-55~150	°C



Weight : 9.75g

**ELECTRICAL CHARACTERISTICS (Ta = 25°C)**

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I <sub>CB0</sub>	V <sub>CB</sub> = -200V, I <sub>E</sub> = 0	—	—	-5.0	μA
Emitter Cut-off Current	I <sub>EB0</sub>	V <sub>EB</sub> = -5V, I <sub>C</sub> = 0	—	—	-5.0	μA
Collector-Emitter Breakdown Voltage	V <sub>(BR)CEO</sub>	I <sub>C</sub> = -50mA, I <sub>B</sub> = 0	-200	—	—	V
DC Current Gain	h <sub>FE(1)</sub> (Note)	V <sub>CE</sub> = -5V, I <sub>C</sub> = -1A	55	—	160	
	h <sub>FE(2)</sub>	V <sub>CE</sub> = -5V, I <sub>C</sub> = -8A	35	60	—	
Collector-Emitter Saturation Voltage	V <sub>CE(sat)</sub>	I <sub>C</sub> = -10A, I <sub>B</sub> = -1A	—	-1.5	-3.0	V
Base-Emitter Voltage	V <sub>BE</sub>	V <sub>CE</sub> = -5V, I <sub>C</sub> = -8A	—	-1.0	-1.5	V
Transition Frequency	f <sub>T</sub>	V <sub>CE</sub> = -5V, I <sub>C</sub> = -1A	—	25	—	MHz
Collector Output Capacitance	C <sub>ob</sub>	V <sub>CB</sub> = -10V, I <sub>E</sub> = 0, f = 1MHz	—	470	—	pF

Note : h<sub>FE(1)</sub> Classification R : 55~110, O : 80~160

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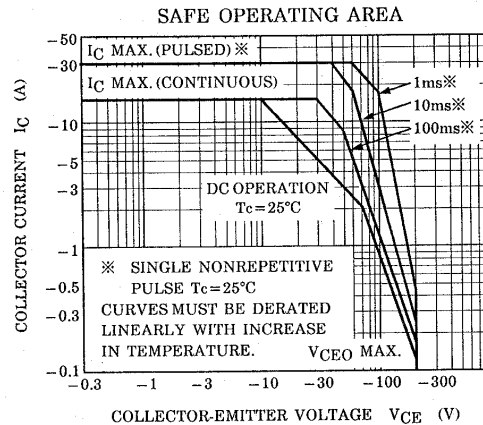
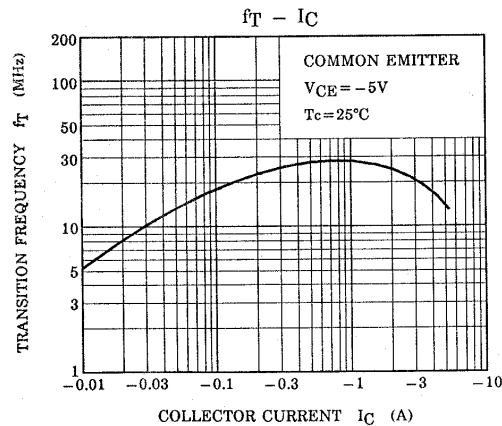
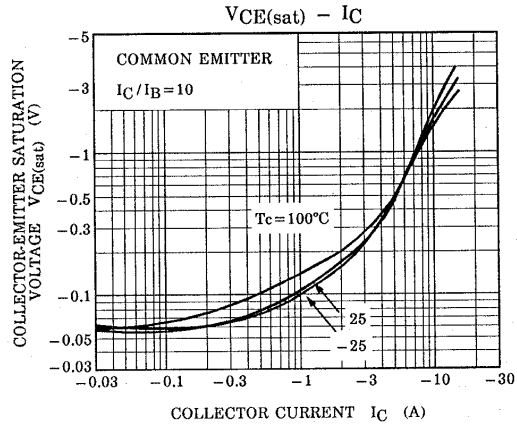
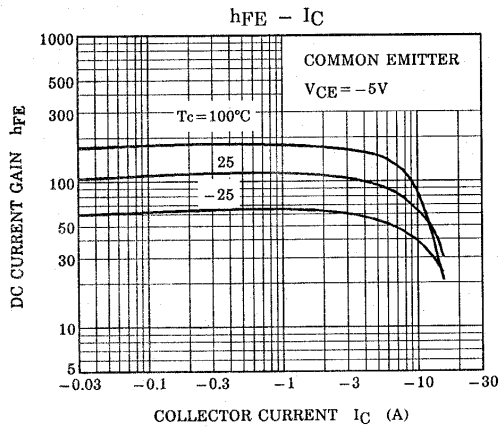
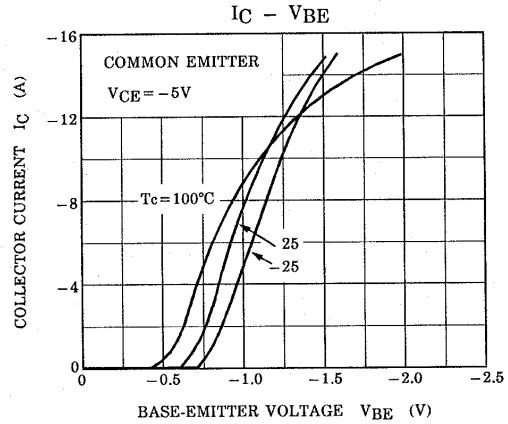
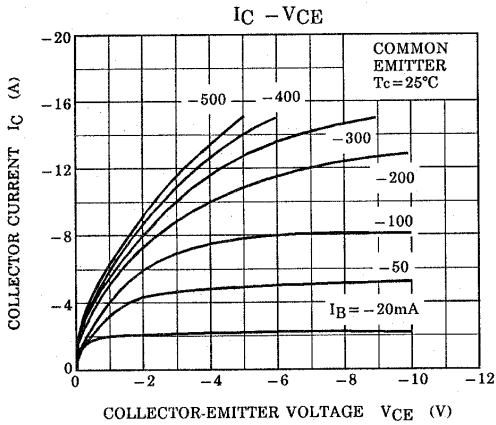
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