

TOSHIBA TRANSISTOR SILICON PNP TRIPLE DIFFUSED TYPE

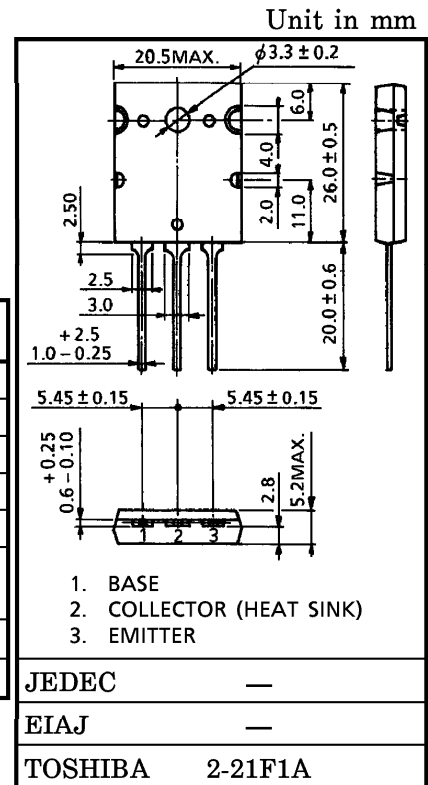
# 2SA1943

POWER AMPLIFIER APPLICATIONS

- Complementary to 2SC5200
- Recommended for 100 W High Fidelity Audio Frequency Amplifier Output Stage.

MAXIMUM RATINGS (Ta = 25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	V <sub>CB0</sub>	-230	V
Collector-Emitter Voltage	V <sub>CEO</sub>	-230	V
Emitter-Base Voltage	V <sub>EBO</sub>	-5	V
Collector Current	I <sub>C</sub>	-15	A
Base Current	I <sub>B</sub>	-1.5	A
Collector Power Dissipation (Tc = 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



ELECTRICAL CHARACTERISTICS (Ta = 25°C)

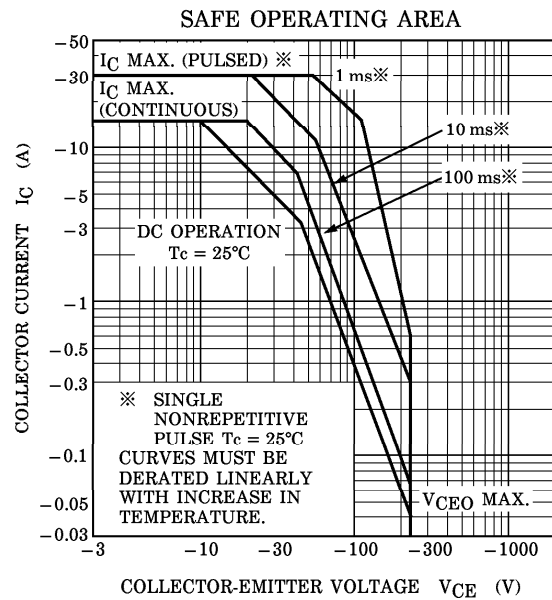
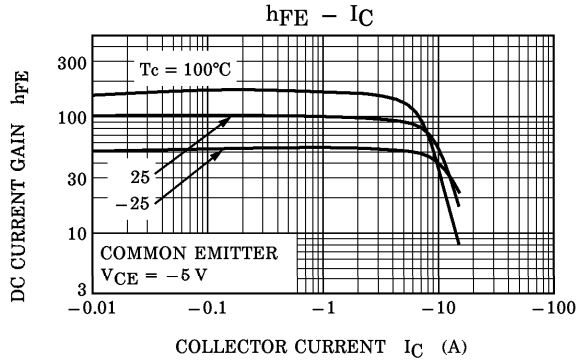
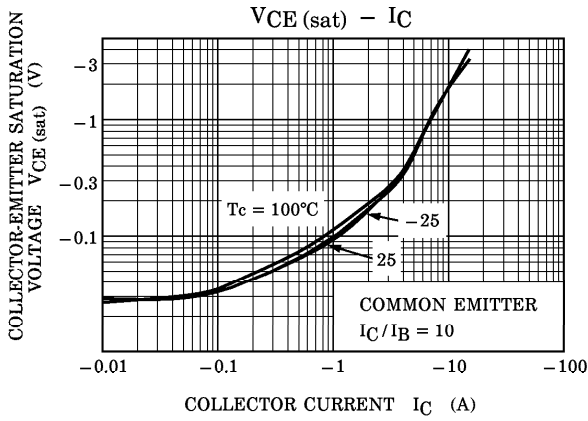
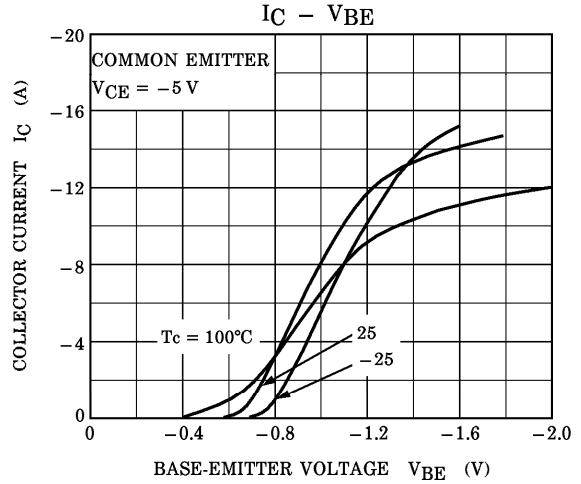
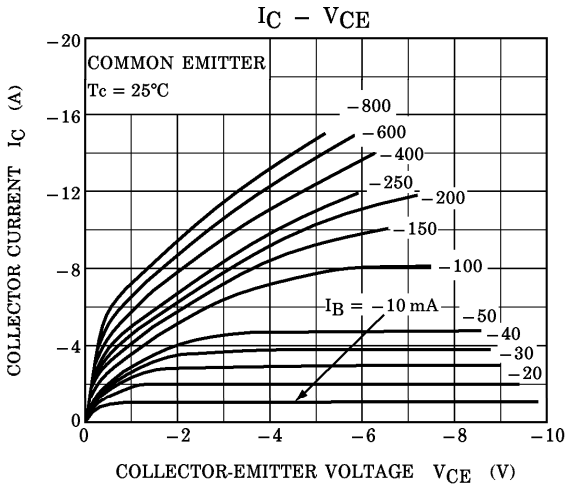
Weight : 9.75 g (Typ.)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I <sub>CBO</sub>	V <sub>CB</sub> = -230 V, I <sub>E</sub> = 0	—	—	-5.0	μA
Emitter Cut-off Current	I <sub>EBO</sub>	V <sub>EB</sub> = -5 V, I <sub>C</sub> = 0	—	—	-5.0	μA
Collector-Emitter Breakdown Voltage	V <sub>(BR)CEO</sub>	I <sub>C</sub> = -50 mA, I <sub>B</sub> = 0	-230	—	—	V
DC Current Gain	h <sub>FE</sub> (1) (Note)	V <sub>CE</sub> = -5 V, I <sub>C</sub> = -1 A	55	—	160	
	h <sub>FE</sub> (2)	V <sub>CE</sub> = -5 V, I <sub>C</sub> = -7 A	35	60	—	
Collector-Emitter Saturation Voltage	V <sub>CE(sat)</sub>	I <sub>C</sub> = -8 A, I <sub>B</sub> = -0.8 A	—	-1.5	-3.0	V
Base-Emitter Voltage	V <sub>BE</sub>	V <sub>CE</sub> = -5 V, I <sub>C</sub> = -7 A	—	-1.0	-1.5	V
Transition Frequency	f <sub>T</sub>	V <sub>CE</sub> = -5 V, I <sub>C</sub> = -1 A	—	30	—	MHz
Collector Output Capacitance	C <sub>ob</sub>	V <sub>CB</sub> = -10 V, I <sub>E</sub> = 0, f = 1 MHz	—	360	—	pF

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

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