

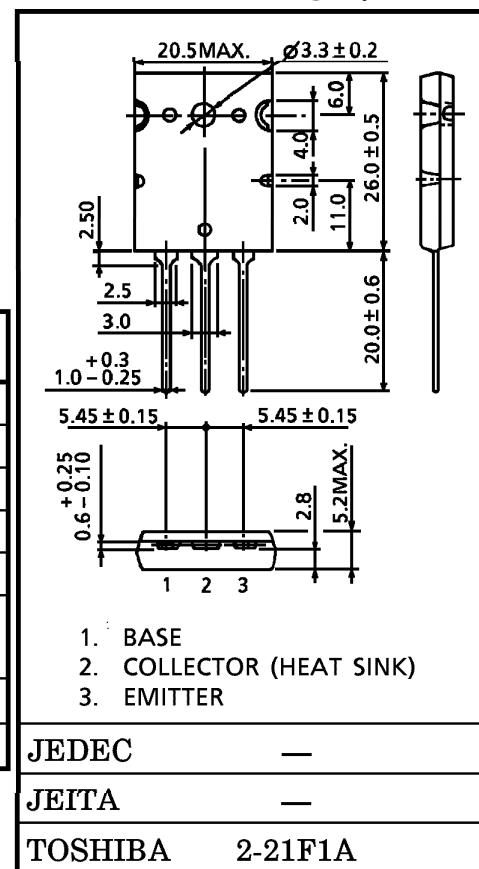
# 2SA1943

## POWER AMPLIFIER APPLICATIONS

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

MAXIMUM RATINGS ( $T_c = 25^\circ\text{C}$ )

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	$V_{CB0}$	-230	V
Collector-Emitter Voltage	$V_{CEO}$	-230	V
Emitter-Base Voltage	$V_{EB0}$	-5	V
Collector Current	$I_C$	-15	A
Base Current	$I_B$	-1.5	A
Collector Power Dissipation ( $T_c = 25^\circ\text{C}$ )	$P_C$	150	W
Junction Temperature	$T_j$	150	$^\circ\text{C}$
Storage Temperature Range	$T_{stg}$	-55~150	$^\circ\text{C}$

ELECTRICAL CHARACTERISTICS ( $T_c = 25^\circ\text{C}$ )

Weight : 9.75 g (Typ.)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	$I_{CBO}$	$V_{CB} = -230\text{ V}, I_E = 0$	—	—	-5.0	$\mu\text{A}$
Emitter Cut-off Current	$I_{EBO}$	$V_{EB} = -5\text{ V}, I_C = 0$	—	—	-5.0	$\mu\text{A}$
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C = -50\text{ mA}, I_B = 0$	-230	—	—	V
DC Current Gain	$h_{FE(1)}$ (Note)	$V_{CE} = -5\text{ V}, I_C = -1\text{ A}$	55	—	160	
	$h_{FE(2)}$	$V_{CE} = -5\text{ V}, I_C = -7\text{ A}$	35	60	—	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = -8\text{ A}, I_B = -0.8\text{ A}$	—	-1.5	-3.0	V
Base-Emitter Voltage	$V_{BE}$	$V_{CE} = -5\text{ V}, I_C = -7\text{ A}$	—	-1.0	-1.5	V
Transition Frequency	$f_T$	$V_{CE} = -5\text{ V}, I_C = -1\text{ A}$	—	30	—	MHz
Collector Output Capacitance	$C_{ob}$	$V_{CB} = -10\text{ V}, I_E = 0,$ $f = 1\text{ MHz}$	—	360	—	pF

(Note) :  $h_{FE(1)}$  Classification R : 55~110, O : 80~160

