

Transistor

Silicon NPN Triple Diffused Type

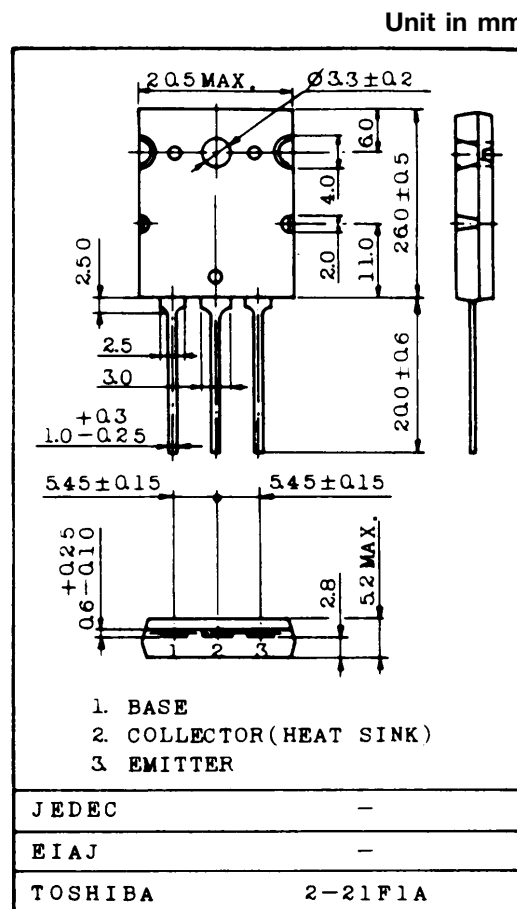
Power Amplifier Applications

Features

- Complementary to 2SA1302
- Recommended for 100W High Fidelity Audio Frequency Amplifier Output Stage

Absolute Maximum Ratings (Ta = 25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	V_{CB0}	200	V
Collector-Emitter Voltage	V_{CE0}	200	V
Emitter-Base Voltage	V_{EB0}	5	V
Collector Current	I_C	15	A
Base Current	I_B	1.5	A
Collector Power Dissipation (Tc = 25°C)	P_C	150	W
Junction Temperature	T_j	150	°C
Storage Temperature Range	T_{stg}	-55 ~ 150	°C

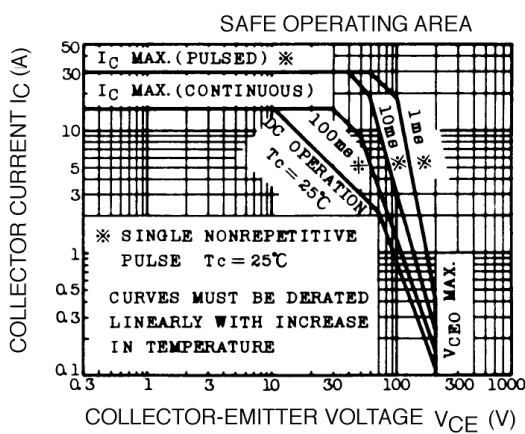
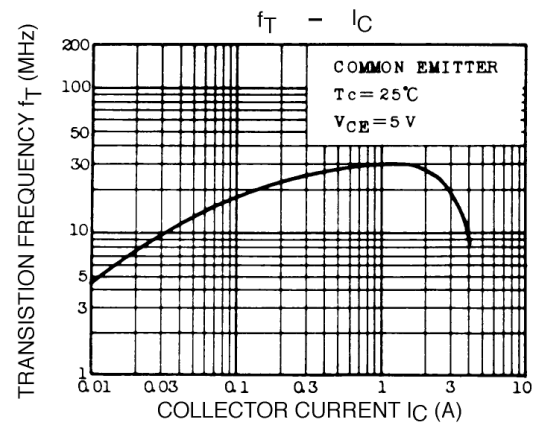
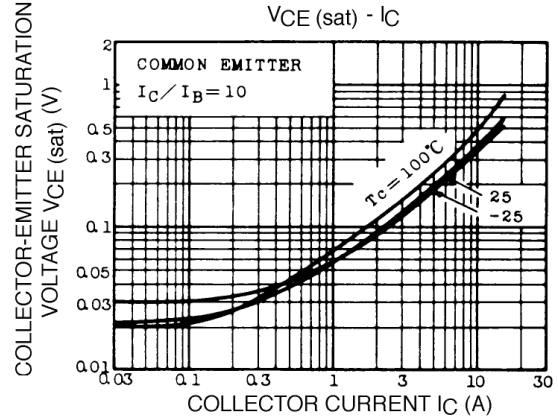
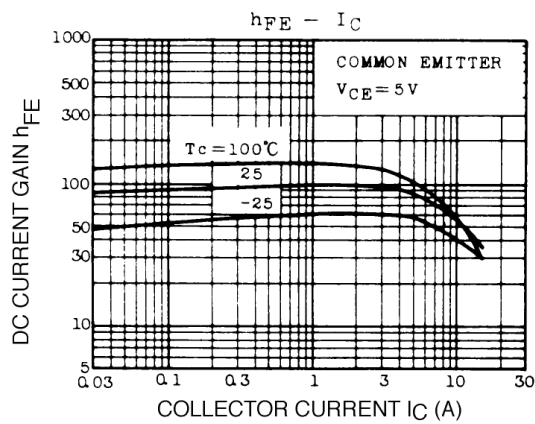
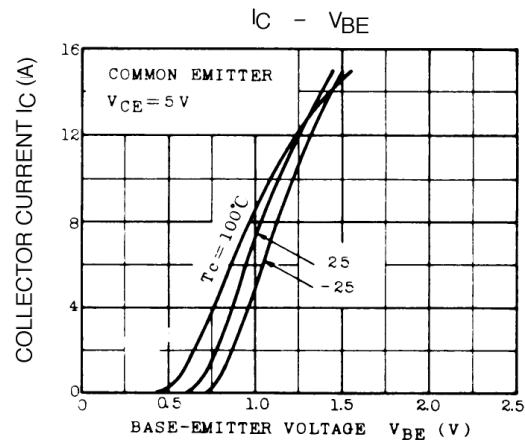
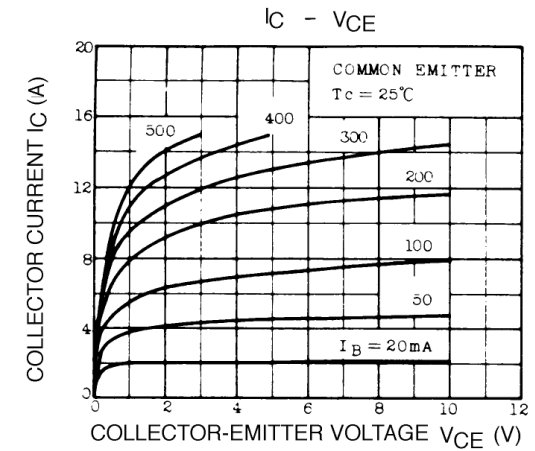


Electrical Characteristics (Ta = 25°C)

Weight : 9.75g

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I_{CB0}	$V_{CB} = 200V, I_E = 0$	—	—	5.0	μA
Emitter Cut-off Current	I_{EB0}	$V_{EB} = 5V, I_C = 0$	—	—	5.0	μA
Collector-Emitter Breakdown Voltage	$V_{(BR) CE0}$	$I_C = 50mA, I_B = 0$	200	—	—	V
DC Current Gain	$h_{FE(1)}$ (Note)	$V_{CE} = 5V, I_C = 1mA$	55	—	160	
	$h_{FE(2)}$	$V_{CE} = 5V, I_C = 8A$	35	60	—	
Saturation Voltage Collector-Emitter	$V_{CE(sat)}$	$I_C = 10A, I_B = 1A$	—	0.40	3.0	V
Base-Emitter Voltage	V_{BE}	$V_{CE} = 5V, I_C = 8A$	—	1.0	1.5	V
Transition Frequency	f_T	$V_{CE} = 5V, I_C = 1A$	—	30	—	MHz
Collector Output Capacitance	C_{ob}	$V_{CB} = 10V, I_E = 0, f = 1MHz$	—	270	—	pF

Note: h_{FE} (1) Classification R : 0: 55 ~ 110, O : 80 ~ 160



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