

TOSHIBA Transistor Silicon PNP Epitaxial Type (PCT process)

2SA817

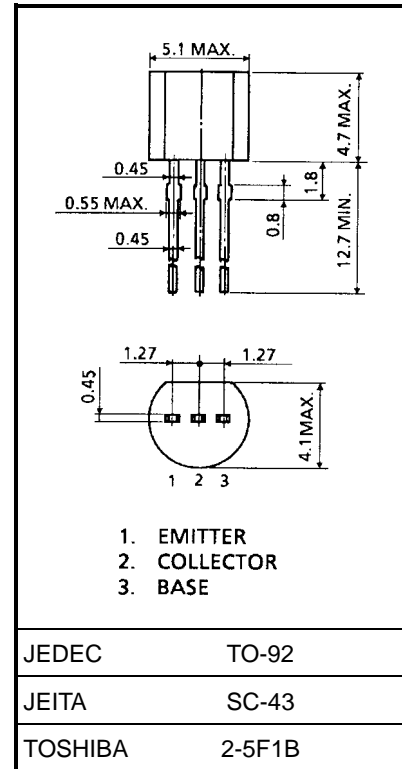
Audio Frequency Amplifier Applications

- Complementary to 2SC1627.
- Suitable for driver of 20~25 watts audio amplifiers.

Maximum Ratings (Ta = 25°C)

Characteristics	Symbol	Rating	Unit
Collector-base voltage	V_{CBO}	-80	V
Collector-emitter voltage	V_{CEO}	-80	V
Emitter-base voltage	V_{EBO}	-5	V
Collector current	I_C	-300	mA
Base current	I_B	-60	mA
Collector power dissipation	P_C	600	mW
Junction temperature	T_j	150	°C
Storage temperature range	T_{stg}	-55~150	°C

Unit: mm

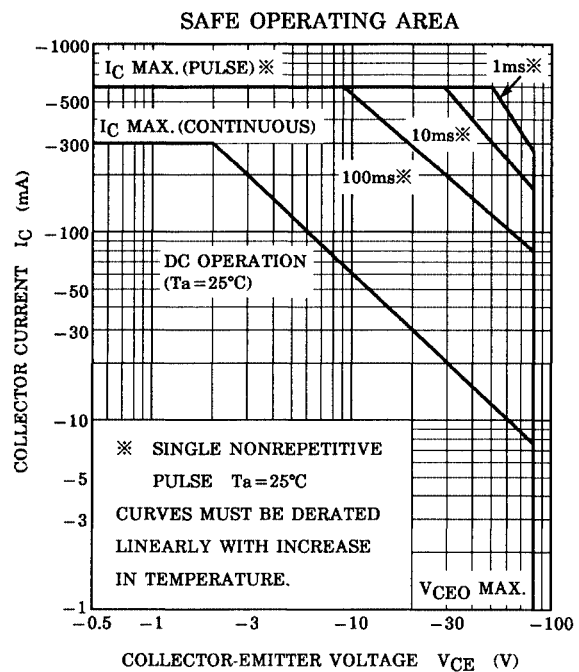
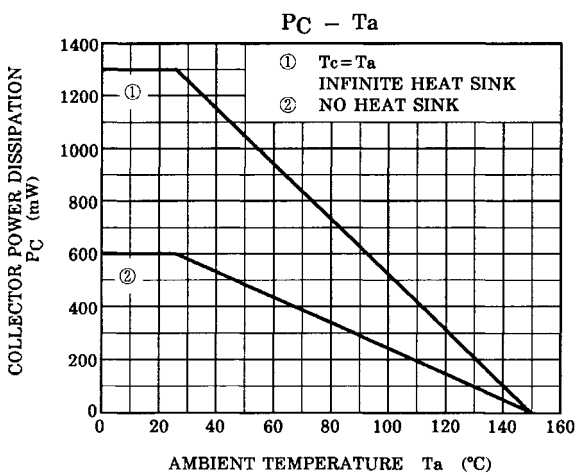
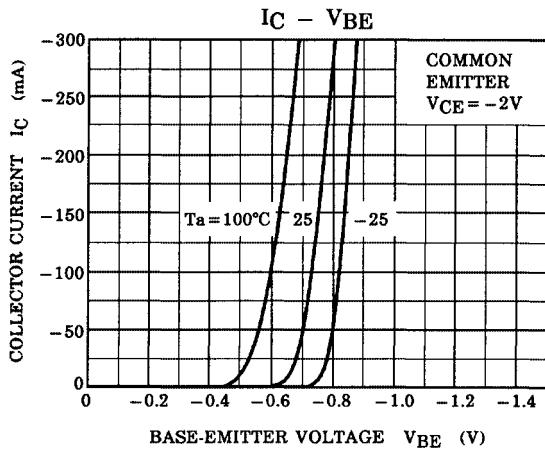
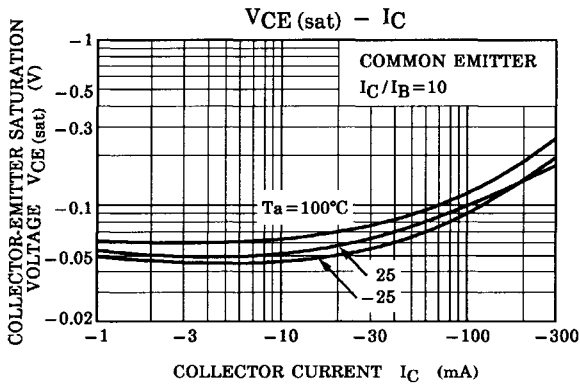
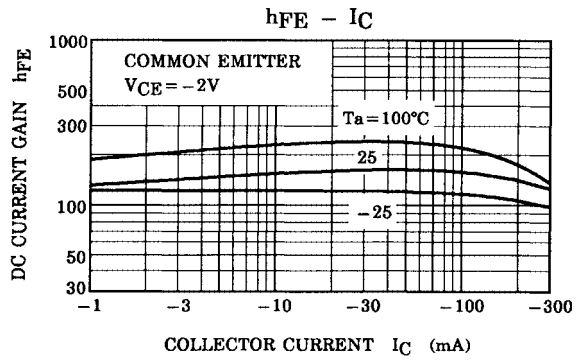
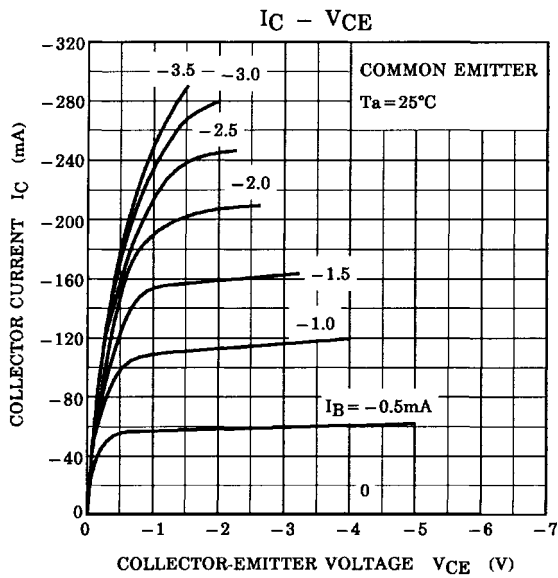


Weight: 0.21 g (typ.)

Electrical Characteristics (Ta = 25°C)

Characteristics	Symbol	Test Condition	Min	Typ.	Max	Unit
Collector cut-off current	I_{CBO}	$V_{CB} = -50 V, I_E = 0$	—	—	-0.1	μA
Emitter cut-off current	I_{EBO}	$V_{EB} = -5 V, I_C = 0$	—	—	-0.1	μA
Collector-emitter breakdown voltage	$V_{(BR) CEO}$	$I_C = -5 mA, I_B = 0$	-80	—	—	V
DC current gain	$h_{FE (1)}$ (Note)	$V_{CE} = -2 V, I_C = -50 mA$	70	—	240	
	$h_{FE (2)}$	$V_{CE} = -2 V, I_C = -200 mA$	40	—	—	
Collector-emitter saturation voltage	$V_{CE (sat)}$	$I_C = -200 mA, I_B = -20 mA$	—	—	-0.4	V
Base-emitter voltage	V_{BE}	$V_{CE} = -2 V, I_C = -5 mA$	-0.55	—	-0.8	V
Transition frequency	f_T	$V_{CE} = -10 V, I_C = -10 mA$	70	100	—	MHz
Collector output capacitance	C_{ob}	$V_{CB} = -10 V, I_E = 0, f = 1 MHz$	—	14	—	pF

Note: $h_{FE (1)}$ classification O: 70~140, Y: 120~240



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