

TOSHIBA Transistor Silicon NPN Epitaxial Type (PCT process)

2SC2883

Audio Frequency Amplifier Applications

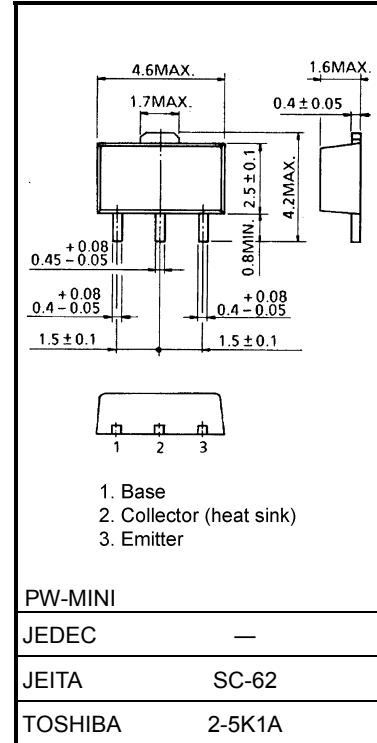
- Suitable for output stage of 3 watts amplifier
- Small flat package
- PC = 1.0 to 2.0 W (mounted on a ceramic substrate)
- Complementary to 2SA1203

Maximum Ratings (Ta = 25°C)

Characteristics	Symbol	Rating	Unit
Collector-base voltage	V _{CB0}	30	V
Collector-emitter voltage	V _{CEO}	30	V
Emitter-base voltage	V _{EB0}	5	V
Collector current	I _C	1.5	A
Base current	I _B	0.3	A
Collector power dissipation	P _C	500	mW
	P _C (Note 1)	1000	
Junction temperature	T _j	150	°C
Storage temperature range	T _{stg}	-55 to 150	°C

Note 1: Mounted on a ceramic substrate (250 mm² × 0.8 t)

Unit: mm



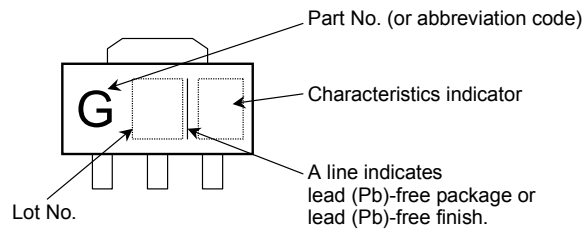
Weight: 0.05 g (typ.)

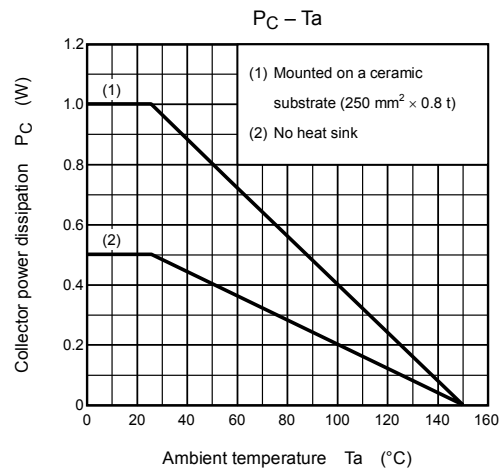
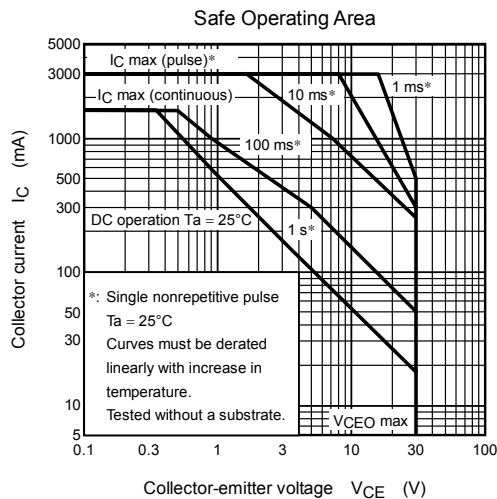
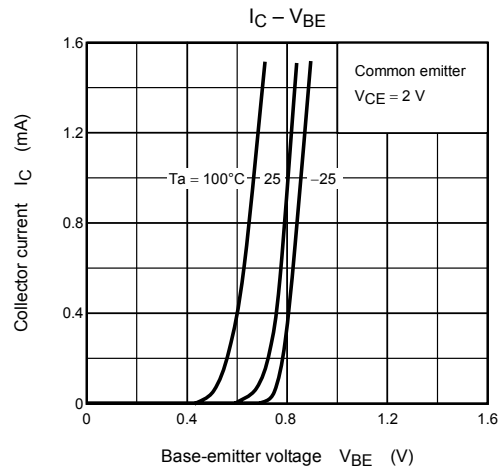
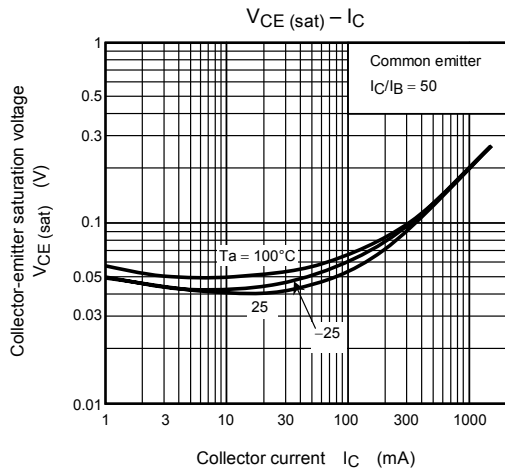
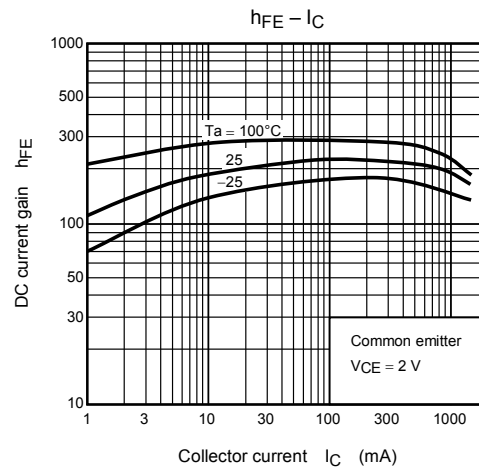
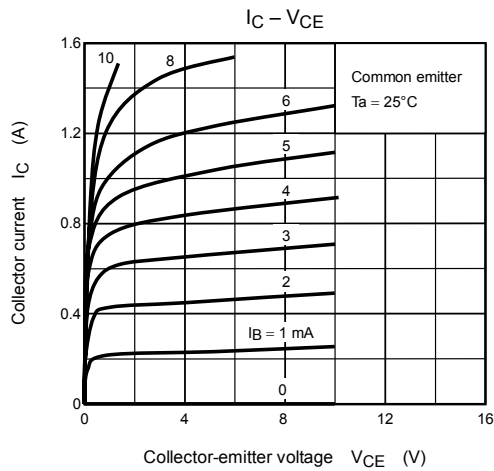
Electrical Characteristics (Ta = 25°C)

Characteristics	Symbol	Test Condition	Min	Typ.	Max	Unit
Collector cut-off current	I_{CBO}	$V_{CB} = 30\text{ V}, I_E = 0$	—	—	0.1	μA
Emitter cut-off current	I_{EBO}	$V_{EB} = 5\text{ V}, I_C = 0$	—	—	0.1	μA
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = 10\text{ mA}, I_B = 0$	30	—	—	V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E = 1\text{ mA}, I_C = 0$	5	—	—	V
DC current gain	h_{FE} (Note 2)	$V_{CE} = 2\text{ V}, I_C = 500\text{ mA}$	100	—	320	—
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = 1.5\text{ A}, I_B = 0.03\text{ A}$	—	—	2.0	V
Base-emitter voltage	V_{BE}	$V_{CE} = 2\text{ V}, I_C = 500\text{ mA}$	—	—	1.0	V
Transition frequency	f_T	$V_{CE} = 2\text{ V}, I_C = 500\text{ mA}$	—	120	—	MHz
Collector output capacitance	C_{ob}	$V_{CB} = 10\text{ V}, I_E = 0, f = 1\text{ MHz}$	—	—	40	pF

Note 2: h_{FE} classification O: 100 to 200, Y: 160 to 320

Marking





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