

TOSHIBA Transistor Silicon NPN Epitaxial Type (PCT process)

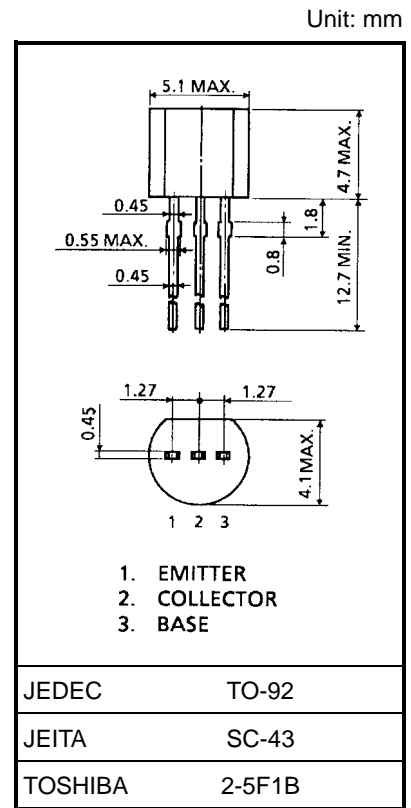
2SC3266

Power Amplifier Applications
Power Switching Applications

- Low saturation voltage: $V_{CE(sat)} = 0.5\text{ V (max)}$ ($I_C = 2\text{ A}$)
- Complementary to 2SA1296

Maximum Ratings ($T_a = 25^\circ\text{C}$)

Characteristics	Symbol	Rating	Unit
Collector-base voltage	V_{CBO}	20	V
Collector-emitter voltage	V_{CEO}	20	V
Emitter-base voltage	V_{EBO}	6	V
Collector current	I_C	2	A
Base current	I_B	0.5	A
Collector power dissipation	P_C	750	mW
Junction temperature	T_j	150	$^\circ\text{C}$
Storage temperature range	T_{stg}	-55~150	$^\circ\text{C}$

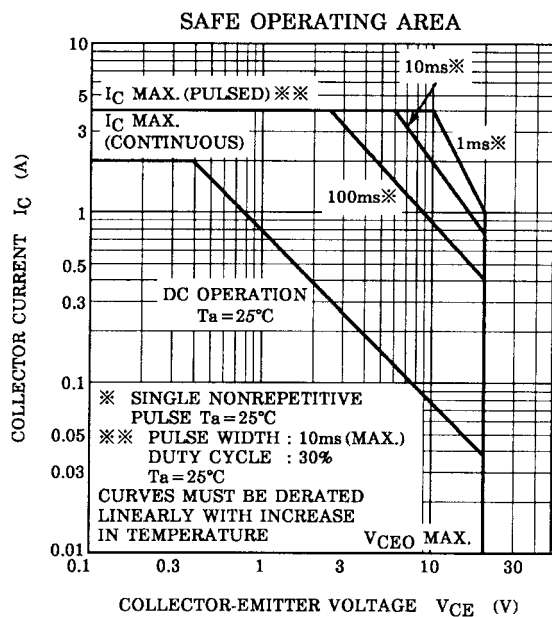
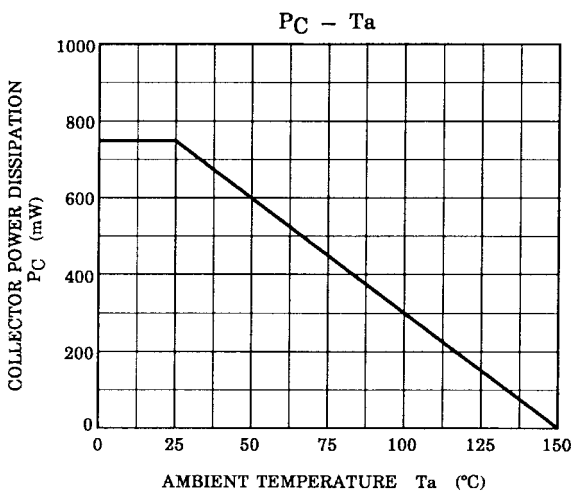
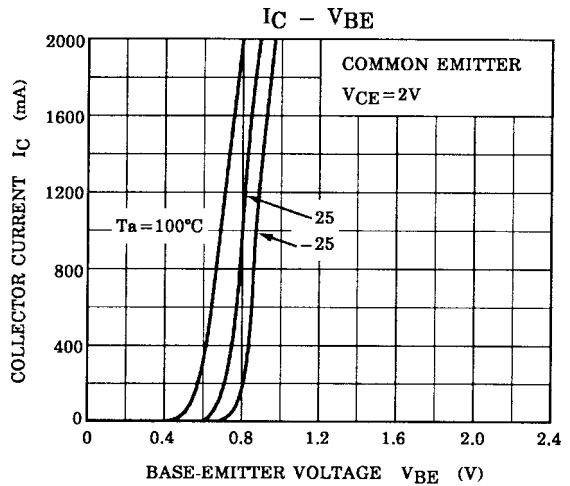
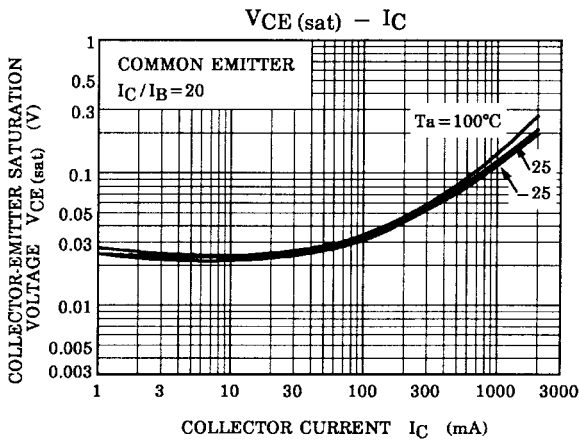
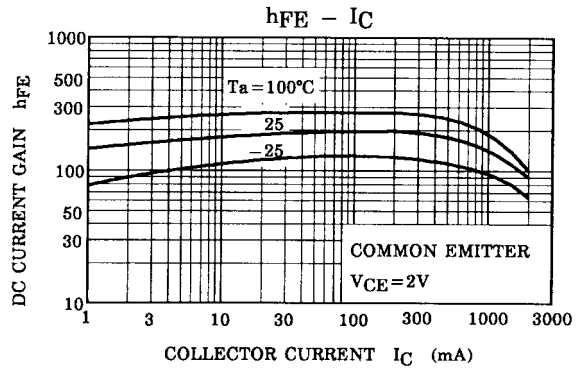
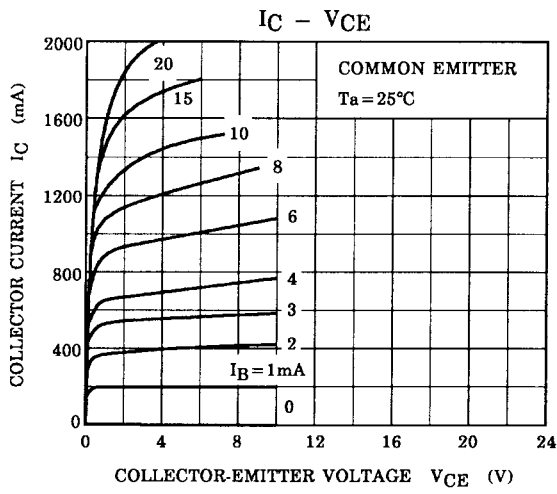


Weight: 0.21 g (typ.)

Electrical Characteristics ($T_a = 25^\circ\text{C}$)

Characteristics	Symbol	Test Condition	Min	Typ.	Max	Unit
Collector cut-off current	I_{CBO}	$V_{CB} = 20\text{ V}, I_E = 0$	—	—	0.1	μA
Emitter cut-off current	I_{EBO}	$V_{EB} = 6\text{ V}, I_C = 0$	—	—	0.1	μA
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = 10\text{ mA}, I_B = 0$	20	—	—	V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E = 0.1\text{ mA}, I_C = 0$	6	—	—	V
DC current gain	$h_{FE(1)}$ (Note)	$V_{CE} = 2\text{ V}, I_C = 0.1\text{ A}$	120	—	700	
	$h_{FE(2)}$	$V_{CE} = 2\text{ V}, I_C = 2\text{ A}$	75	—	—	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = 2\text{ A}, I_B = 0.1\text{ A}$	—	—	0.5	V
Base-emitter voltage	V_{BE}	$V_{CE} = 2\text{ V}, I_C = 0.1\text{ A}$	—	—	0.85	V
Transition frequency	f_T	$V_{CE} = 2\text{ V}, I_C = 0.5\text{ A}$	—	120	—	MHz
Collector output capacitance	C_{ob}	$V_{CB} = 10\text{ V}, I_E = 0, f = 1\text{ MHz}$	—	30	—	pF

Note: $h_{FE(1)}$ classification Y: 120~240, GR: 200~400, BL: 350~700



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