

TOSHIBA Transistor Silicon NPN Epitaxial Type (PCT Process)

2SC3671

Strobe Flash Applications

Medium Power Amplifier Applications

- High DC current gain and excellent hFE linearity
: hFE = 140 to 450 (VCE = 2 V, IC = 0.5 A)
: hFE = 70 (min) (VCE = 2 V, IC = 4 A)
- Low saturation voltage: VCE (sat) = 1.0 V (max) (IC = 4 A, IB = 0.1 A)
- High collector power dissipation

Maximum Ratings (Ta = 25°C)

Characteristics		Symbol	Rating	Unit
Collector-base voltage		V _{CB0}	50	V
Collector-emitter voltage		V _{CES}	40	V
		V _{CEO}	20	
Emitter-base voltage		V _{EBO}	8	V
Collector current	DC	I _C	5	A
	Pulse (Note 1)	I _{CP}	8	
Base current		I _B	0.5	A
Collector power dissipation		P _C	1000	mW
Junction temperature		T _j	150	°C
Storage temperature range		T _{stg}	-55 to 150	°C

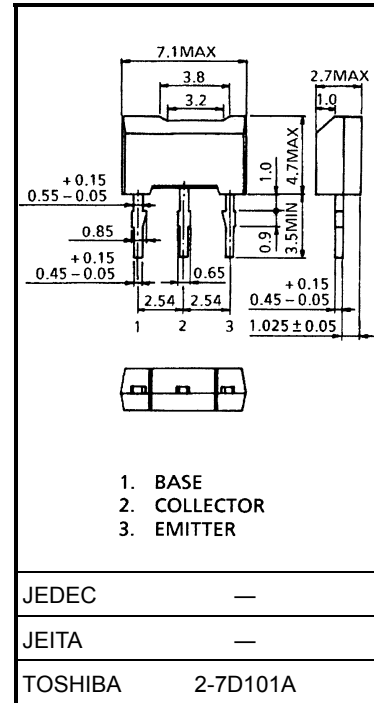
Note 1: Pulse test: Pulse width = 10 ms (max), duty cycle = 30% (max)

Electrical Characteristics (Ta = 25°C)

Characteristics	Symbol	Test Condition	Min	Typ.	Max	Unit
Collector cut-off current	I _{CB0}	V _{CB} = 40 V, I _E = 0	—	—	100	nA
Emitter cut-off current	I _{EBO}	V _{EB} = 8 V, I _C = 0	—	—	100	nA
Collector-emitter breakdown voltage	V _{CEO}	I _C = 10 mA, I _B = 0	20	—	—	V
Emitter-base breakdown voltage	V _{EBO}	I _E = 1 mA, I _C = 0	8	—	—	V
DC current gain	h _{FE} (1) (Note 2)	V _{CE} = 2 V, I _C = 0.5 A	140	—	450	
	h _{FE} (2)	V _{CE} = 2 V, I _C = 4 A	70	—	—	
Collector-emitter saturation voltage	V _{CE (sat)}	I _C = 4 A, I _B = 0.1 A	—	—	1.0	V
Base-emitter voltage	V _{BE}	V _{CE} = 2 V, I _C = 4 A	—	—	1.5	V
Transition frequency	f _T	V _{CE} = 2 V, I _C = 0.5 A	—	100	—	MHz
Collector output capacitance	C _{ob}	V _{CB} = 10 V, I _E = 0, f = 1 MHz	—	40	—	pF

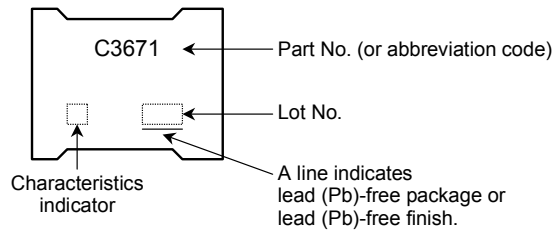
Note 2: h_{FE} (1) classification A: 140 to 240, B: 200 to 330, C: 300 to 450

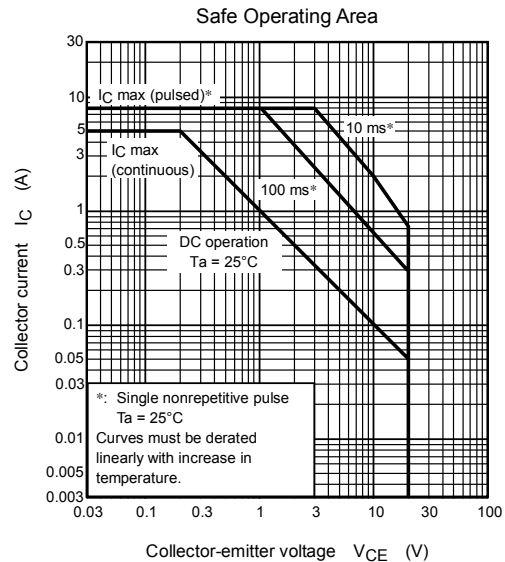
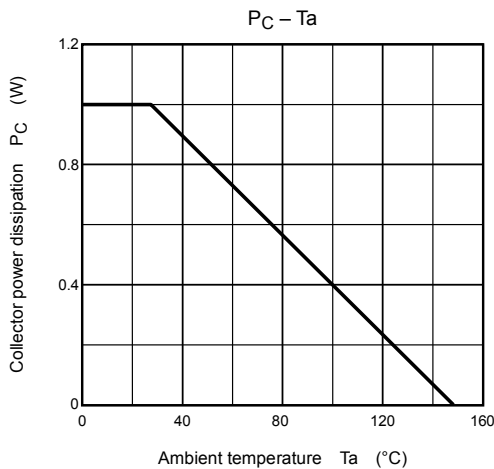
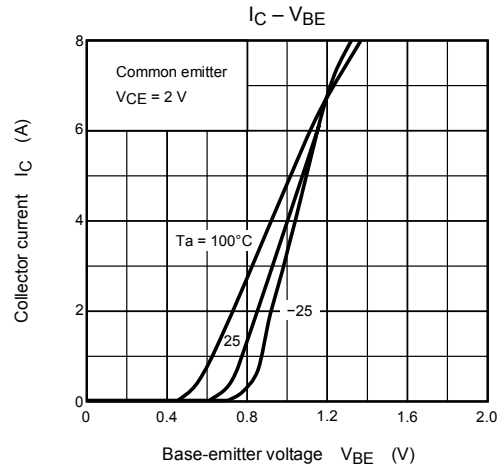
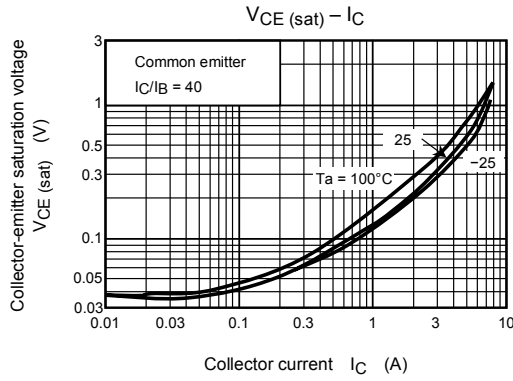
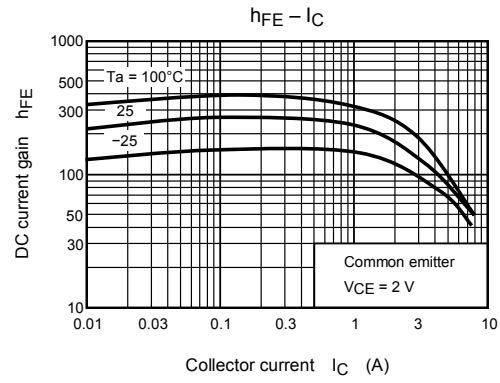
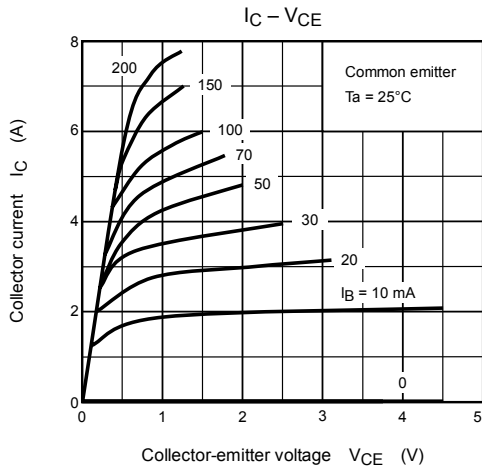
Unit: mm



Weight: 0.2 g (typ.)

Marking





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