

TOSHIBA Transistor Silicon NPN Triple Diffused Type

2SC4689

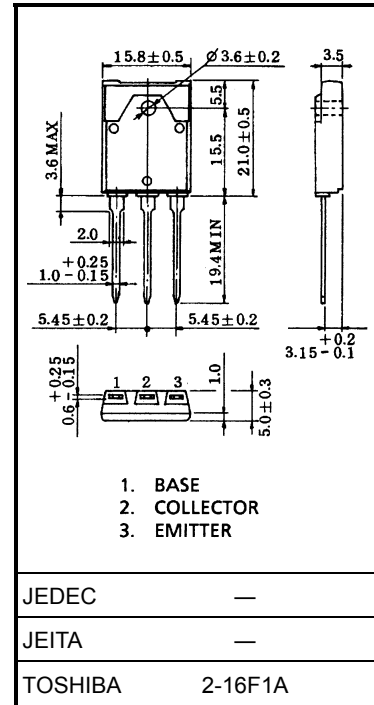
Power Amplifier Applications

Unit: mm

- Complementary to 2SA1804
- Suitable for use in 55-W high fidelity audio amplifier's output stage.

Maximum Ratings (T_c = 25°C)

Characteristics	Symbol	Rating	Unit
Collector-base voltage	V _{CBO}	120	V
Collector-emitter voltage	V _{CEO}	120	V
Emitter-base voltage	V _{EBO}	5	V
Collector current	DC	I _C	A
	Pulse	I _{CP}	
Base current	I _B	0.8	A
Collector power dissipation (T _c = 25°C)	P _C	70	W
Junction temperature	T _j	150	°C
Storage temperature range	T _{stg}	-55 to 150	°C



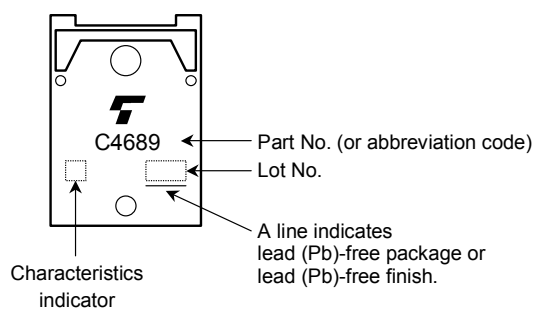
Electrical Characteristics (T_c = 25°C)

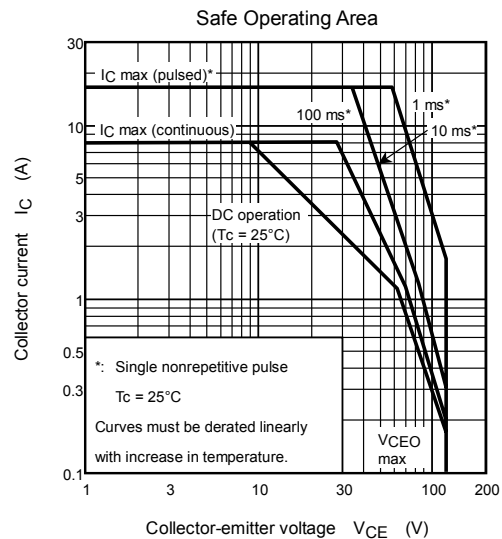
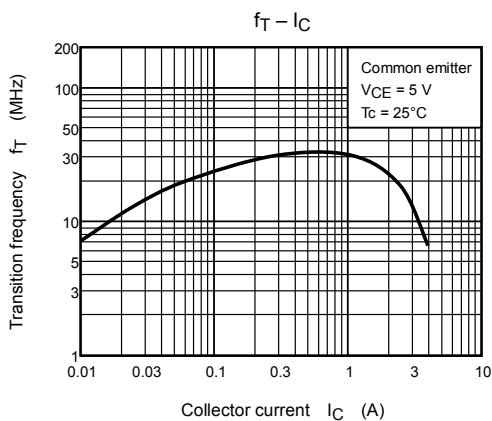
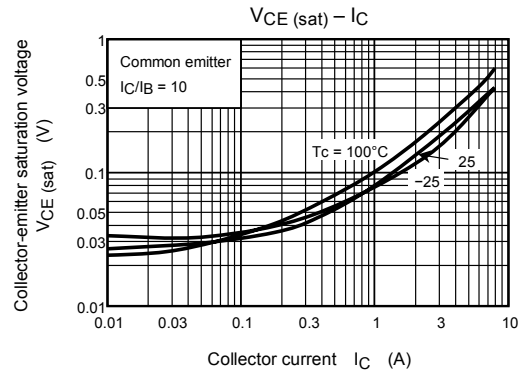
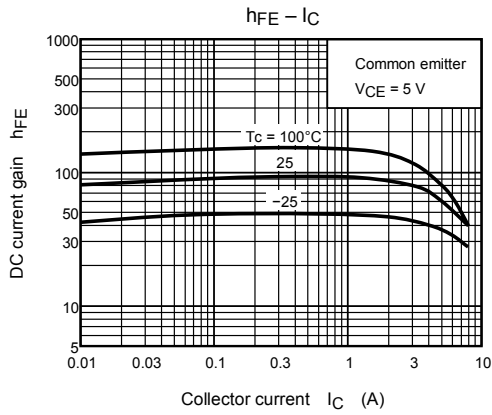
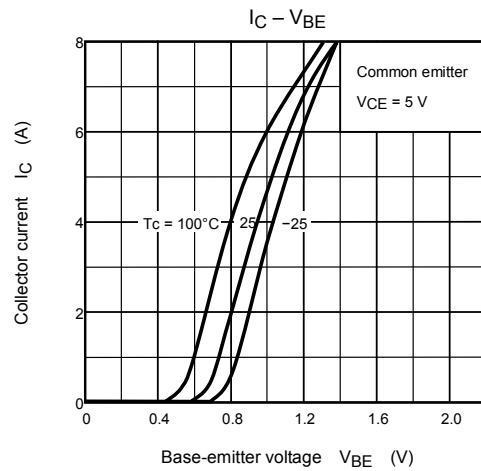
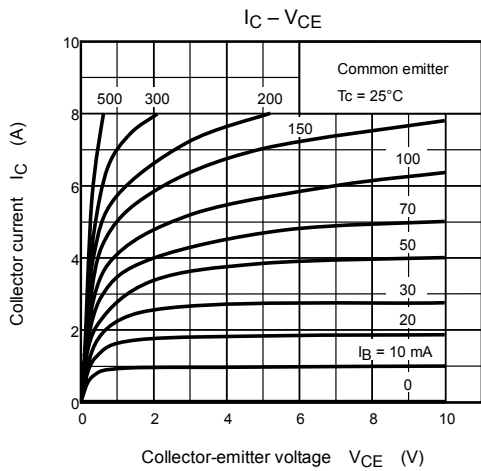
Weight: 5.8 g (typ.)

Characteristics	Symbol	Test Condition	Min	Typ.	Max	Unit
Collector cut-off current	I _{CBO}	V _{CB} = 120 V, I _E = 0	—	—	5.0	μA
Emitter cut-off current	I _{EBO}	V _{EB} = 5 V, I _C = 0	—	—	5.0	μA
Collector-emitter breakdown voltage	V _(BR) CEO	I _C = 50 mA, I _B = 0	120	—	—	V
DC current gain	h _{FE} (1) (Note)	V _{CE} = 5 V, I _C = 1 A	55	—	160	
	h _{FE} (2)	V _{CE} = 5 V, I _C = 4 A	35	75	—	
Collector-emitter saturation voltage	V _{CE} (sat)	I _C = 6 A, I _B = 0.6 A	—	0.35	2.0	V
Base-emitter voltage	V _{BE}	V _{CE} = 5 V, I _C = 4 A	—	0.95	1.5	V
Transition frequency	f _T	V _{CE} = 5 V, I _C = 1 A	—	30	—	MHz
Collector output capacitance	C _{ob}	V _{CB} = 10 V, I _E = 0, f = 1 MHz	—	190	—	pF

Note: h_{FE} (1) classification R: 55 to 110, O: 80 to 160

Marking





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