TOSHIBA Transistor Silicon NPN Epitaxial Type (PCT Process)

2SC2236

Audio Power Amplifier Applications

Unit: mm

• Complementary to 2SA966 and 3-watt output applications.

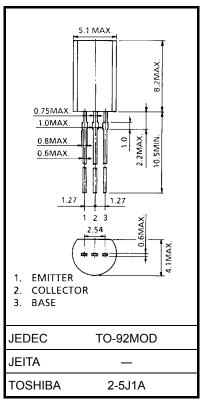
Absolute Maximum Ratings (Ta = 25°C)

Characteristics	Symbol	Rating	Unit
Collector-base voltage	V _{CBO}	30	V
Collector-emitter voltage	V _{CEO}	30	٧
Emitter-base voltage	V _{EBO}	5	٧
Collector current	IC	1.5	Α
Base current	ΙΒ	0.15	Α
Collector power dissipation	PC	900	mW
Junction temperature	Tj	150	°C
Storage temperature range	T _{stg}	−55 to 150	°C

Note: Using continuously under heavy loads (e.g. the application of high temperature/current/voltage and the significant change in temperature, etc.) may cause this product to decrease in the reliability significantly even if the operating conditions (i.e. operating temperature/current/voltage, etc.) are within the absolute maximum ratings.

Please design the appropriate reliability upon reviewing the

Toshiba Semiconductor Reliability Handbook ("Handling Precautions"/Derating Concept and Methods) and individual reliability data (i.e. reliability test report and estimated failure rate, etc).



Weight: 0.36 g (typ.)

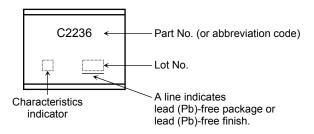


Electrical Characteristics (Ta = 25°C)

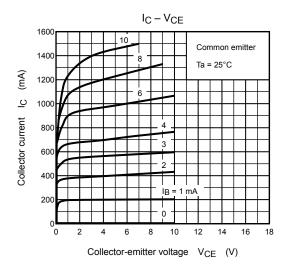
Characteristics	Symbol	Test Condition	Min	Тур.	Max	Unit
Collector cut-off current	I _{CBO}	V _{CB} = 30 V, I _E = 0	_	_	100	nA
Emitter cut-off current	I _{EBO}	V _{EB} = 5 V, I _C = 0	_	_	100	nA
Collector-emitter breakdown voltage	V (BR) CEO	I _C = 10 mA, I _B = 0	30	_	_	V
Emitter-base breakdown voltage	V _(BR) EBO	I _E = 1 mA, I _C = 0	5	_	_	V
DC current gain	h _{FE} (Note)	V _{CE} = 2 V, I _C = 500 mA	100	_	320	
Collector-emitter saturation voltage	V _{CE} (sat)	I _C = 1.5 A, I _B = 0.03 A	_	_	2.0	V
Base-emitter voltage	V _{BE}	V _{CE} = 2 V, I _C = 500 mA	_	_	1.0	V
Transition frequency	f _T	V _{CE} = 2 V, I _C = 500 mA	_	120	_	MHz
Collector output capacitance	C _{ob}	V _{CB} = 10 V, I _E = 0, f = 1 MHz	_	_	30	pF

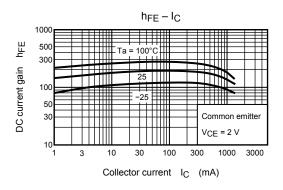
Note: $h_{\mbox{\scriptsize FE}}$ classification O: 100 to 200, Y: 160 to 320

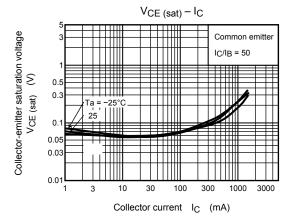
Marking

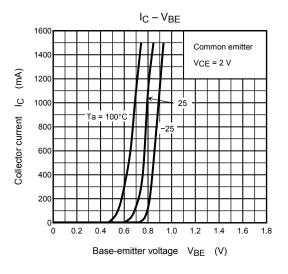


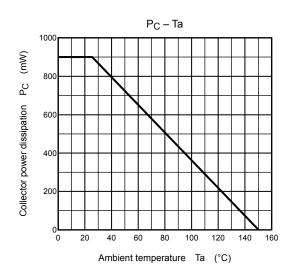
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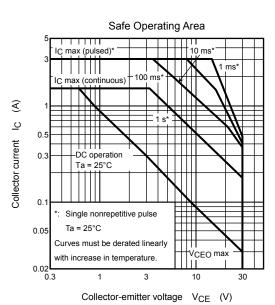












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