TOSHIBA Transistor Silicon NPN Epitaxial Type (PCT Process)

2SC1627A

Driver-Stage Amplifier Applications Voltage Amplifier Applications

- Complementary to 2SA817A.
- Driver-stage applications for 30- to 35-watt amplifiers.

Absolute Maximum Ratings (Ta = 25°C)

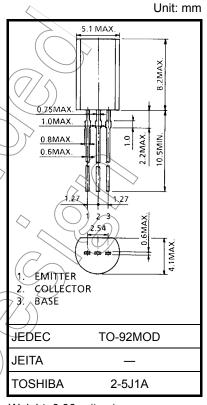
Characteristics	Symbol	Rating	Unit
Collector-base voltage	V_{CBO}	80	(//)
Collector-emitter voltage	V_{CEO}	80	A
Emitter-base voltage	V _{EBO}	5	y
Collector current	Ic	400	> mA
Base current	ΙΒ	40	mA
Collector power dissipation	PC	800	mW
Junction temperature	Tj <	150	/°e
Storage temperature range	T _{stg}	-55 to 150	<< ℃

Note1: Using continuously under heavy loads (e.g. the application of high

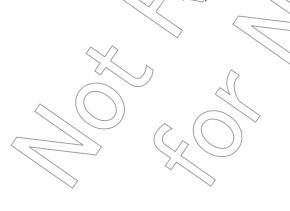
temperature/current/voltage and the significant change in temperature, etc.) may cause this product to decrease in the reliability significantly even if the operating conditions (i.e.

operating temperature/current/voltage, etc.) are within the absolute maximum ratings.

Please design the appropriate reliability upon reviewing the Poshiba 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.)

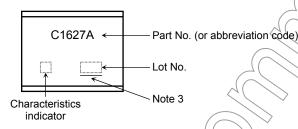


Electrical Characteristics (Ta = 25°C)

Characteristics	Symbol	Test Condition	Min	Тур.	Max	Unit
Collector cut-off current	I _{CBO}	V _{CB} = 50 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 = 5 mA	80	_	_	V
DC current gain	h _{FE (1)} (Note 2)	V _{CE} = 2 V, I _C = 50 mA	70	1	240	
	h _{FE (2)}	V _{CE} = 2 V, I _C = 200 mA	40	/_	_	
Collector-emitter saturation voltage	V _{CE} (sat)	I _C = 200 mA, I _B = 20 mA	/	_	0.4	V
Base-emitter voltage	V _{BE}	V _{CE} = 2 V, I _C = 5 mA	0.55	-	0.8	V
Transition frequency	f _T	V _{CE} = 10 V, I _C = 10 mA	_	100	_	MHz
Collector output capacitance	C _{ob}	V _{CB} = 10 V, f = 1 MHz	_	10	-	pF

Note 2: hFE (1) classification O: 70 to 140, Y: 120 to 240

Marking



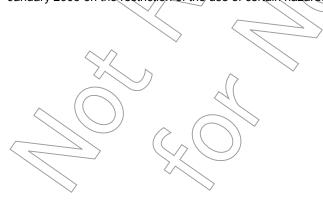
Note 3: A line under a Lot No. identifies the indication of product Labels.

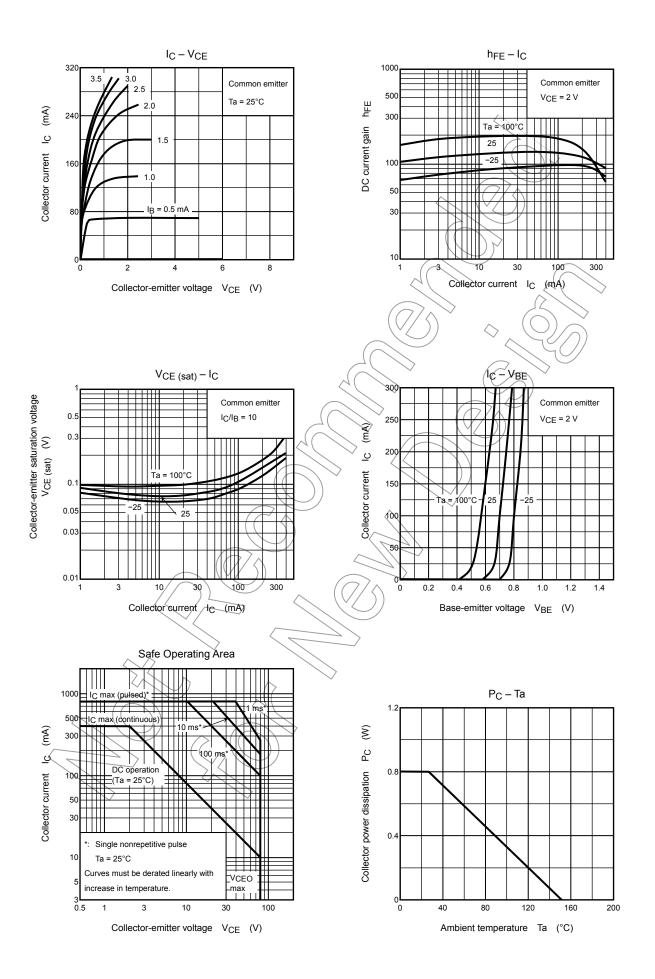
Not underlined: [[Pb]]/INCLUDES > MCV

Underlined: [[G]]/RoHS COMPATIBLE or [[G]]/RoHS [[Rb]]

Please contact your TOSHIBA sales representative for details as to environmental matters such as the RoHS compatibility of Product. The RoHS is the Directive 2002/95/EC of the European Parliament and of the Council of 27 January 2003 on the restriction of the use of certain hazardous substances in electrical and electronic equipment.

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