

TOSHIBA Transistor Silicon NPN Triple Diffused Type

2SC6127

High Voltage Switching Applications

High Voltage Amplifier Applications

Unit: mm

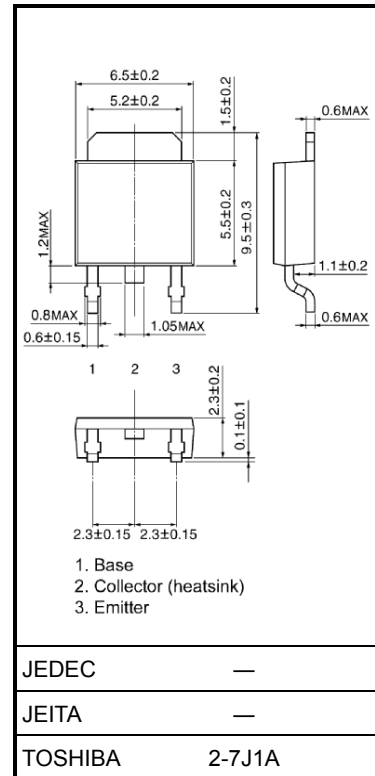
- High voltage: $V_{CEO} = 800\text{ V}$

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

Characteristics	Symbol	Rating	Unit
Collector-base voltage	V_{CBO}	800	V
Collector-emitter voltage	V_{CEO}	800	V
Emitter-base voltage	V_{EBO}	5	V
Collector current	I_C	50	mA
Base current	I_B	25	mA
Collector power dissipation	P_C	1.0	W
		10	
Junction temperature	T_J	150	$^\circ\text{C}$
Storage temperature range	T_{stg}	-55 to 150	$^\circ\text{C}$

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).

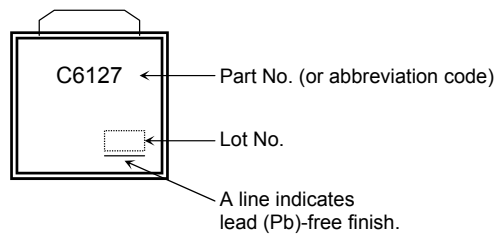


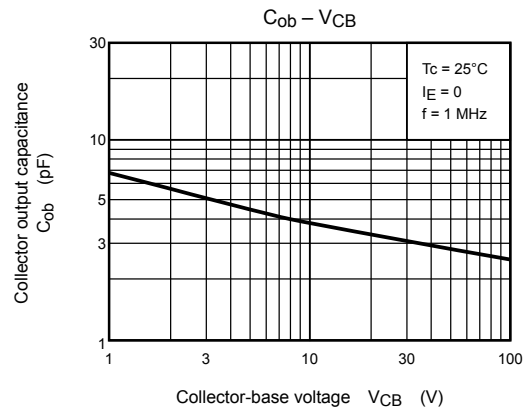
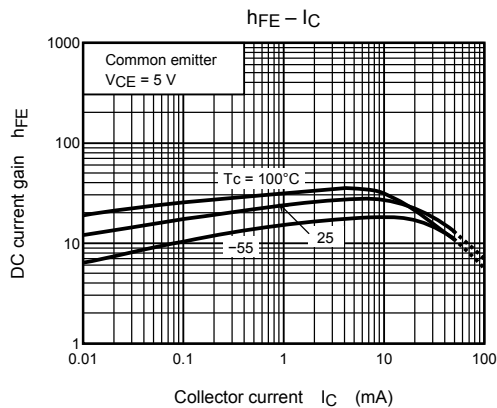
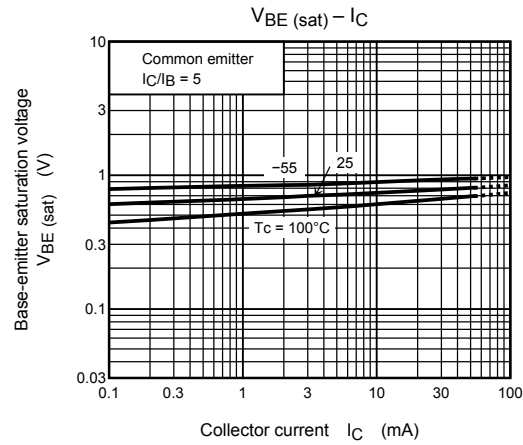
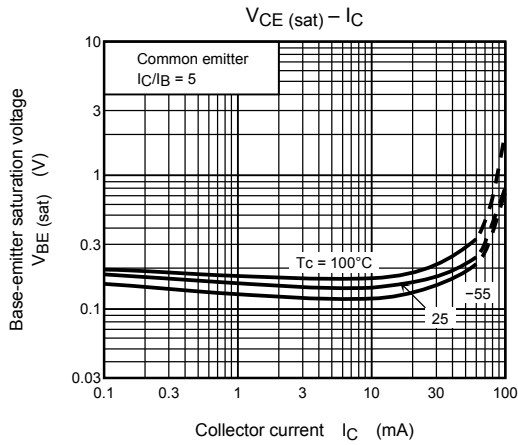
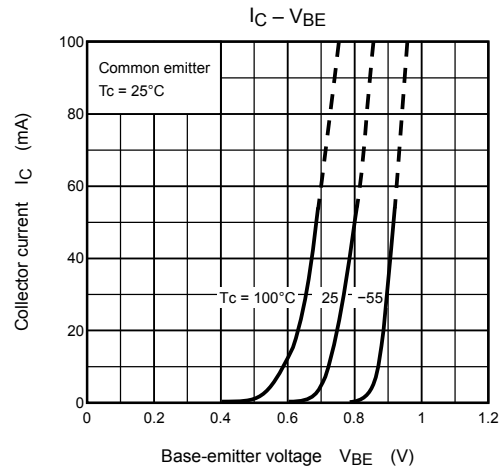
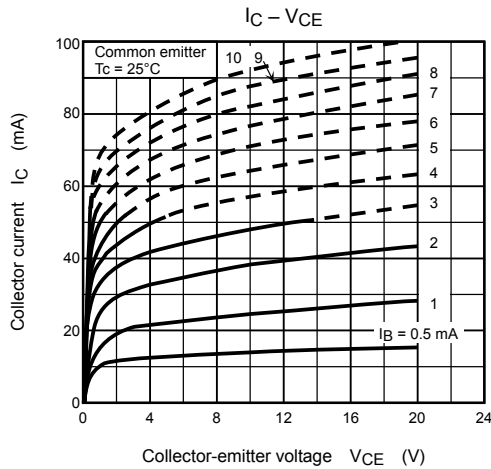
Weight: 0.36 g (typ.)

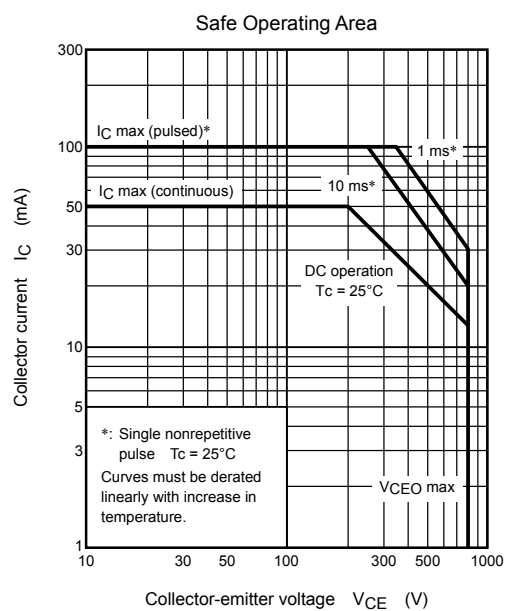
Electrical Characteristics (T_c = 25°C)

Characteristics	Symbol	Test Condition	Min	Typ.	Max	Unit
Collector cut-off current	I _{CBO}	V _{CB} = 640 V, I _E = 0	—	—	1.0	μA
Emitter cut-off current	I _{EBO}	V _{EB} = 5 V, I _C = 0	—	—	10	μA
DC current gain	h _{FE}	V _{CE} = 5 V, I _C = 7 mA	15	—	—	
Collector-emitter saturation voltage	V _{CE (sat)}	I _C = 20 mA, I _B = 4 mA	—	—	1.0	V
Base-emitter saturation voltage	V _{BE (sat)}	I _C = 20 mA, I _B = 4 mA	—	—	1.5	V
Transition frequency	f _T	V _{CE} = 10 V, I _C = 3 mA	—	5.5	—	MHz
Collector output capacitance	C _{ob}	V _{CB} = 100 V, f = 1 MHz	—	2.2	—	pF

Marking







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20070701-EN

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