

TOSHIBA Transistor Silicon NPN Triple Diffused Type

2SC6127

High Voltage Switching Applications
 High Voltage Amplifier Applications

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

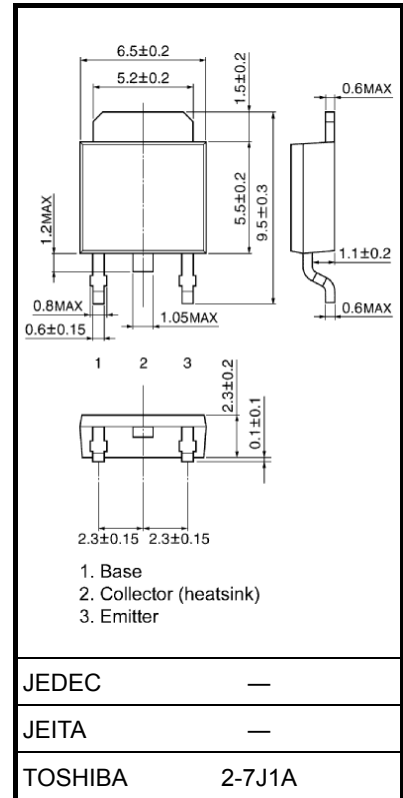
Absolute Maximum Ratings ($T_a = 25^\circ\text{C}$)

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	$T_a = 25^\circ\text{C}$	1.0
		$T_c = 25^\circ\text{C}$	10
Junction temperature	T_j	150	$^\circ\text{C}$
Storage temperature range	T_{stg}	-55 to 150	$^\circ\text{C}$

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

Unit: mm



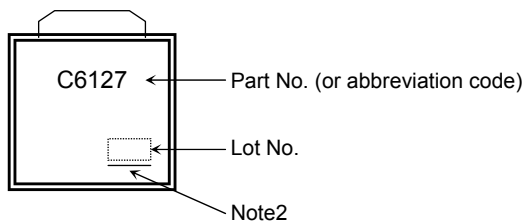
Weight: 0.36 g (typ.)

Start of commercial production
 2008-11

Electrical Characteristics (Ta = 25°C)

Characteristics	Symbol	Test Condition	Min	Typ.	Max	Unit
Collector cut-off current	I_{CBO}	$V_{CB} = 640\text{ V}, I_E = 0$	—	—	1.0	μA
Emitter cut-off current	I_{EBO}	$V_{EB} = 5\text{ V}, I_C = 0$	—	—	10	μA
DC current gain	h_{FE}	$V_{CE} = 5\text{ V}, I_C = 7\text{ mA}$	15	—	—	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = 20\text{ mA}, I_B = 4\text{ mA}$	—	—	1.0	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C = 20\text{ mA}, I_B = 4\text{ mA}$	—	—	1.5	V
Transition frequency	f_T	$V_{CE} = 10\text{ V}, I_C = 3\text{ mA}$	—	15	—	MHz
Collector output capacitance	C_{ob}	$V_{CB} = 100\text{ V}, f = 1\text{ MHz}$	—	1.8	—	pF

Marking

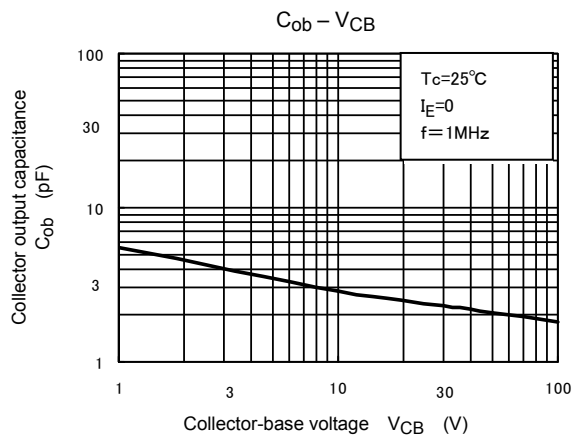
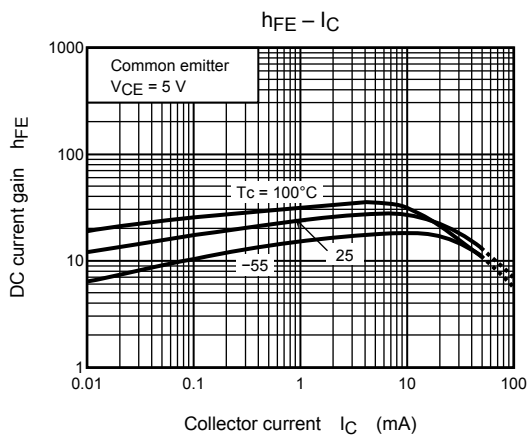
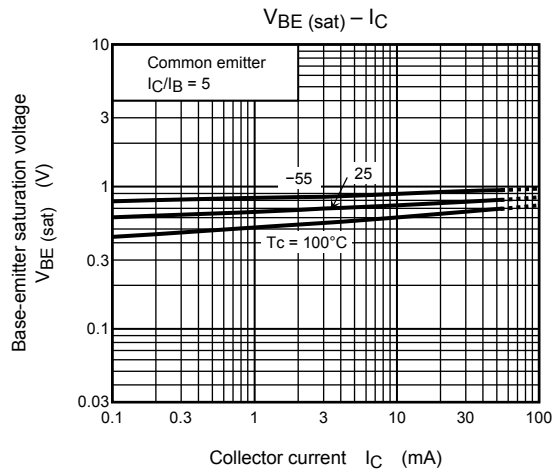
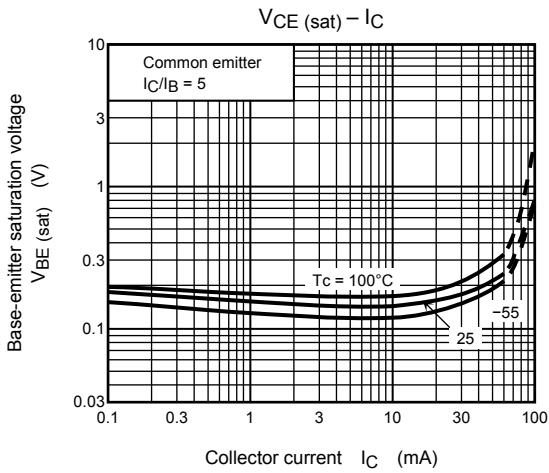
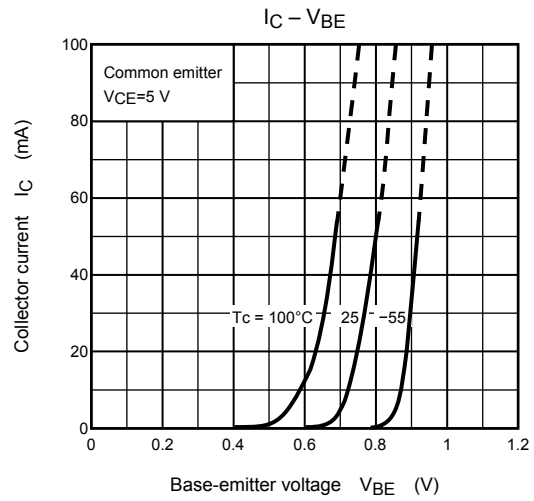
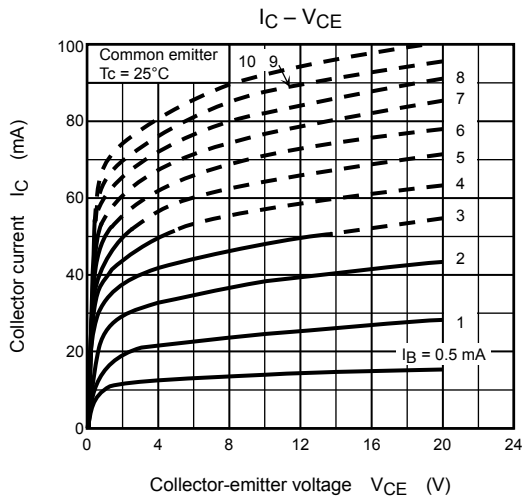


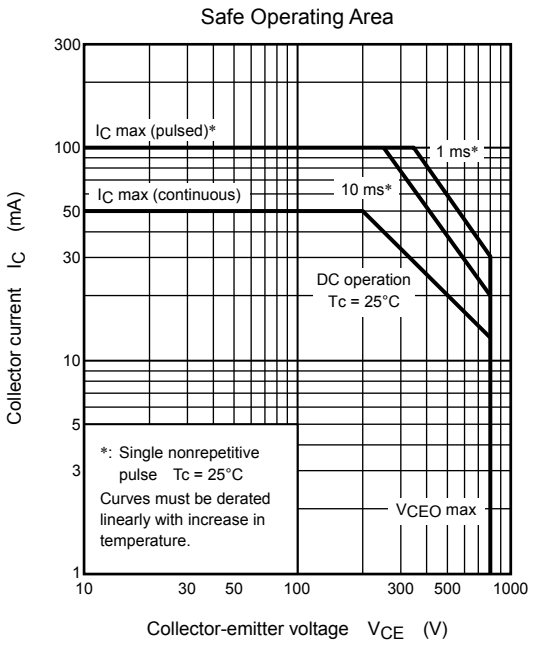
Note2: A line under a Lot No. identifies the indication of product Labels.

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

Underlined: $[[G]]/RoHS\ COMPATIBLE$ or $[[G]]/RoHS\ [[Pb]]$

Please contact your TOSHIBA sales representative for details as to environmental matters such as the RoHS compatibility of Product. The RoHS is the Directive 2011/65/EU of the European Parliament and of the Council of 8 June 2011 on the restriction of the use of certain hazardous substances in electrical and electronic equipment.





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