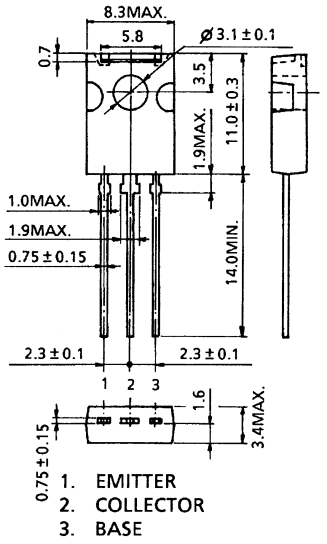
TOSHIBA Transistor Silicon NPN Triple Diffused Type

2SC5460

Dynamic Focus Applications
High-Voltage Switching Applications
High-Voltage Amplifier Applications

- High breakdown voltage: V_{CEO} = 800 V

Unit: mm



JEDEC	—
JEITA	—
TOSHIBA	2-8H1A

Weight: 0.82 g (typ.)

Maximum Ratings (Tc = 25°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	Ta = 25°C	P_C	1.5	W
	Tc = 25°C		10	
Junction temperature		T_j	150	°C
Storage temperature range		T_{stg}	−55 to 150	°C

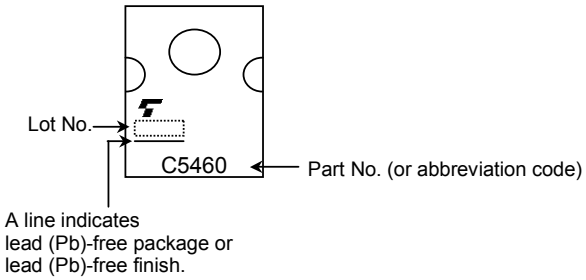
Electrical Characteristics (Tc = 25°C)

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

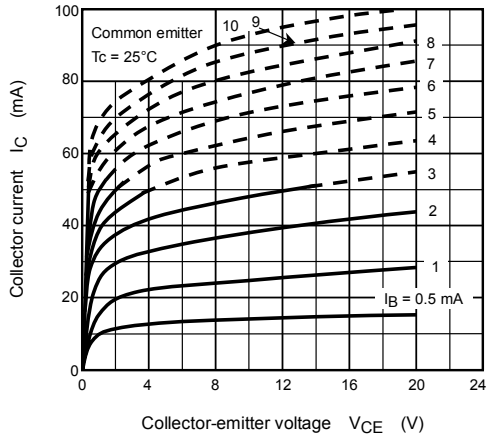
Note: When an external heat sink is used for the device, insulate using, for example, silicone rubber.

When an external heat sink is not used, Toshiba recommends that the plastic part be at least 2 mm away from its surroundings.

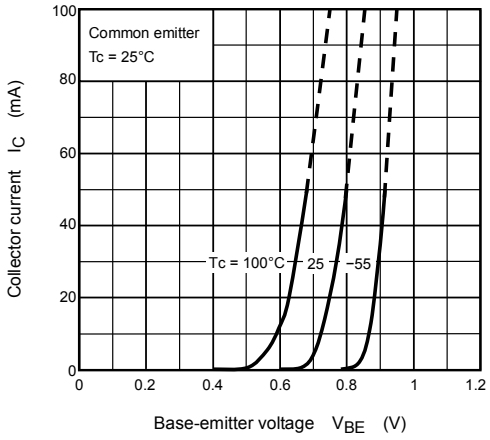
Marking


Lot No.
C5460
Part No. (or abbreviation code)
A line indicates
lead (Pb)-free package or
lead (Pb)-free finish.

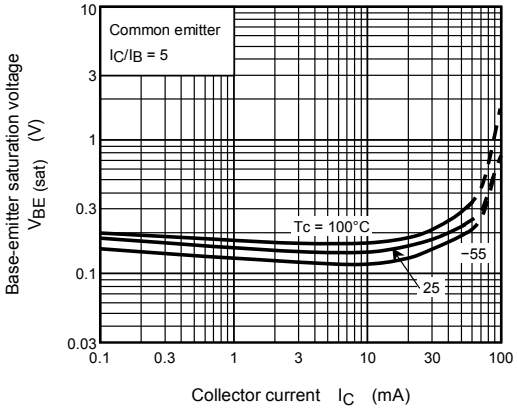
$I_C - V_{CE}$



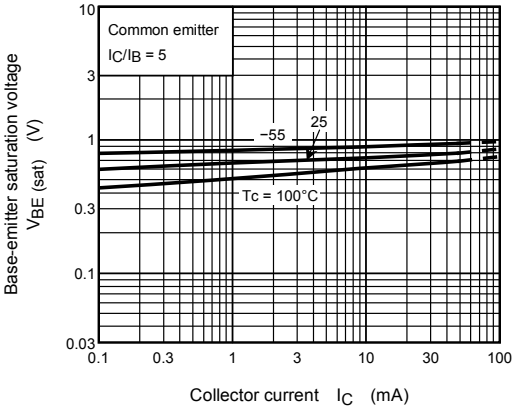
$I_C - V_{BE}$



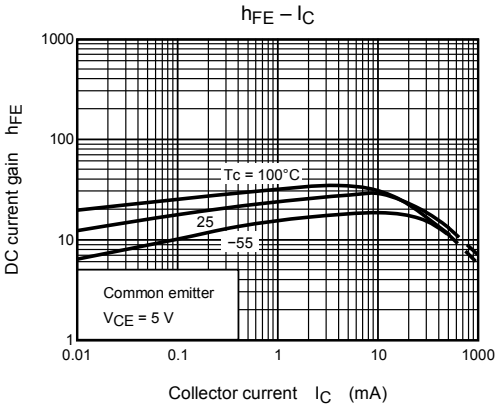
$V_{CE\ (sat)} - I_C$



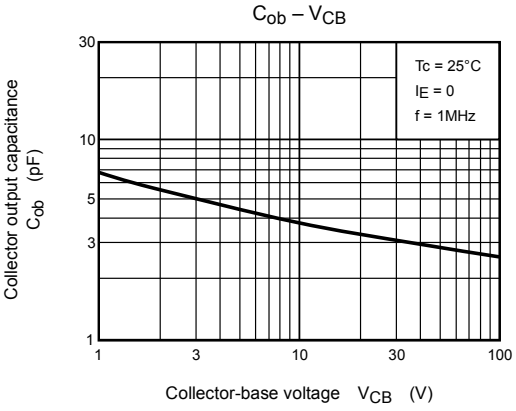
$V_{BE\ (sat)} - I_C$



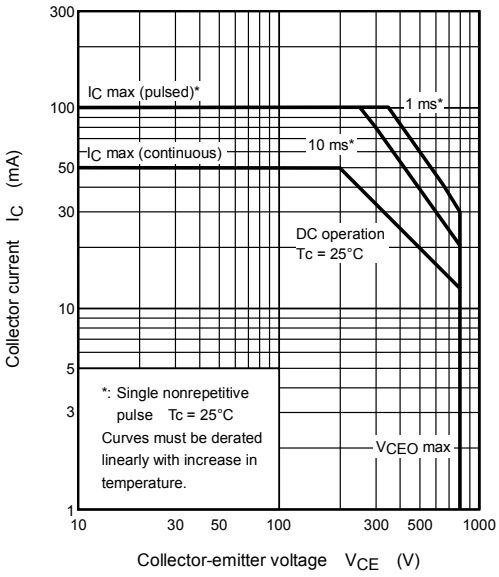
$h_{FE} - I_C$



$C_{ob} - V_{CB}$



Safe Operating Area



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