

TOSHIBA Transistor Silicon NPN Triple Diffused Type

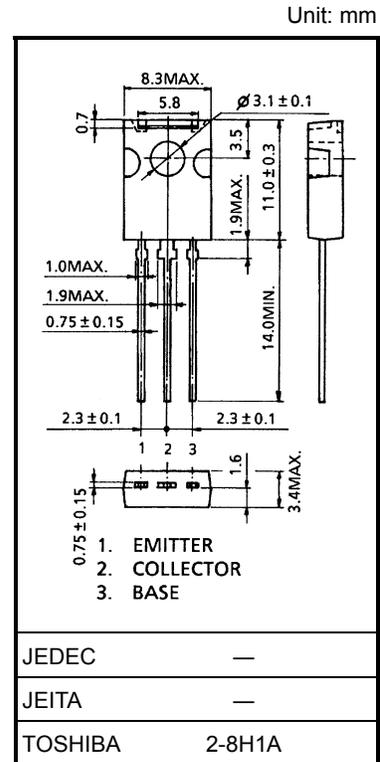
# 2SC5460

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

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

### 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	$P_C$	$T_a = 25^\circ\text{C}$	1.5	W
		$T_c = 25^\circ\text{C}$	10	
Junction temperature	$T_j$	150	$^\circ\text{C}$	
Storage temperature range	$T_{stg}$	-55 to 150	$^\circ\text{C}$	



### Electrical Characteristics ( $T_c = 25^\circ\text{C}$ )

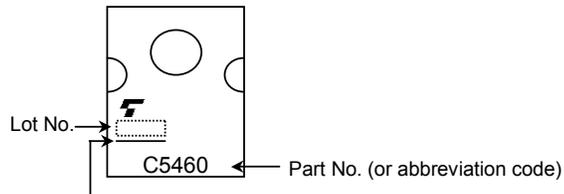
Weight: 0.82 g (typ.)

Characteristics	Symbol	Test Condition	Min	Typ.	Max	Unit
Collector cut-off current	$I_{CBO}$	$V_{CB} = 640\text{ V}, I_E = 0$	—	—	1.0	$\mu\text{A}$
Emitter cut-off current	$I_{EBO}$	$V_{EB} = 5\text{ V}, I_C = 0$	—	—	10	$\mu\text{A}$
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	$f_T$	$V_{CE} = 10\text{ V}, I_C = 3\text{ mA}$	—	5.5	—	MHz
Collector output capacitance	$C_{ob}$	$V_{CB} = 100\text{ V}, f = 1\text{ MHz}$	—	2.2	—	pF

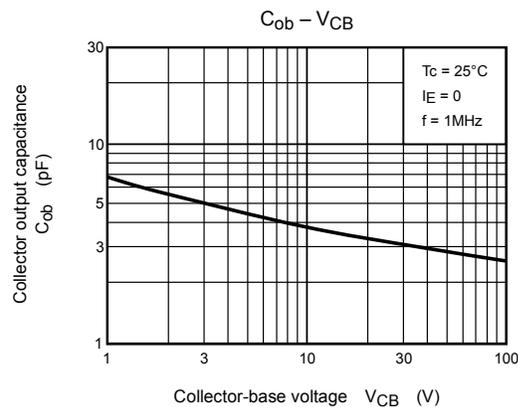
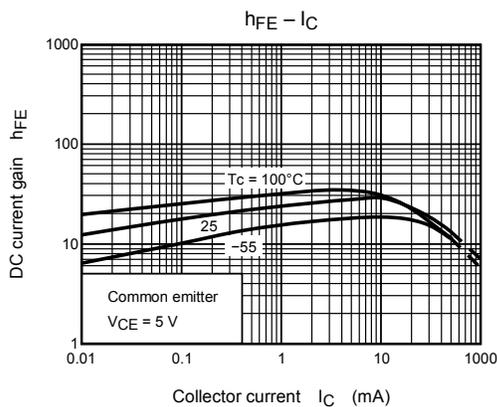
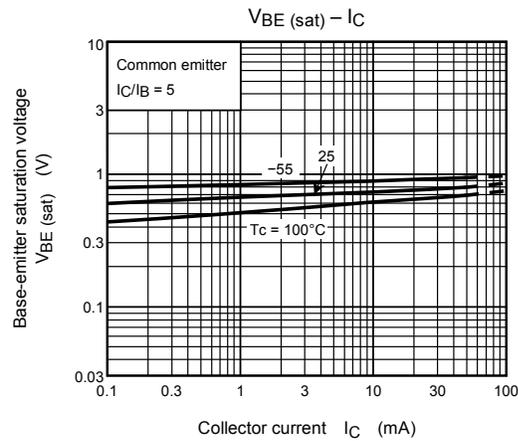
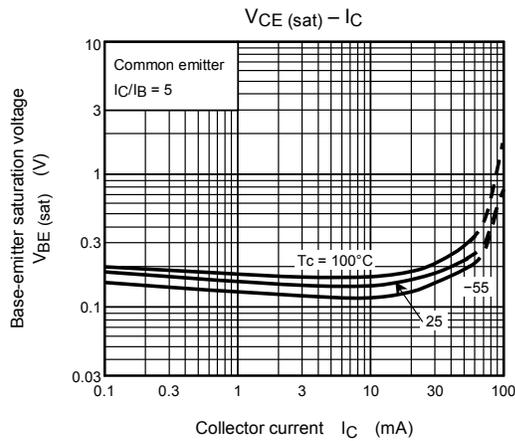
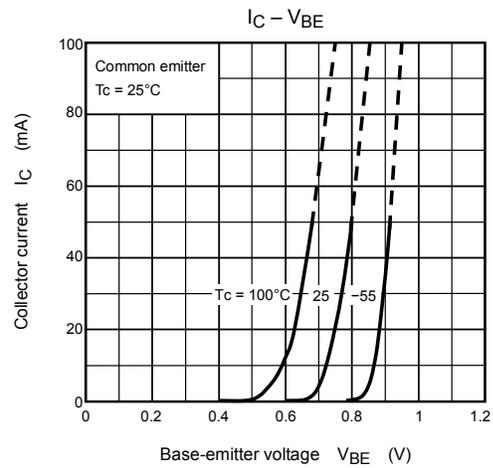
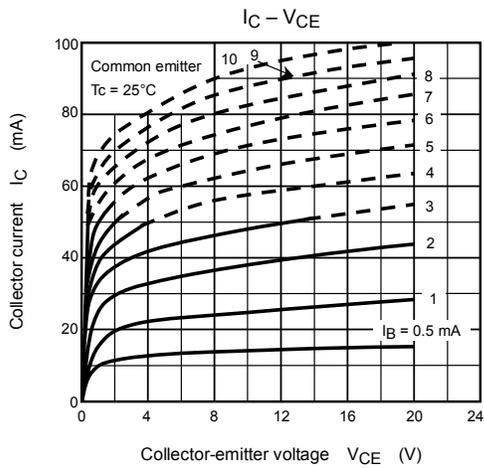
Note: When an external heat sink is used for the device, insulate using, for example, silicone rubber.

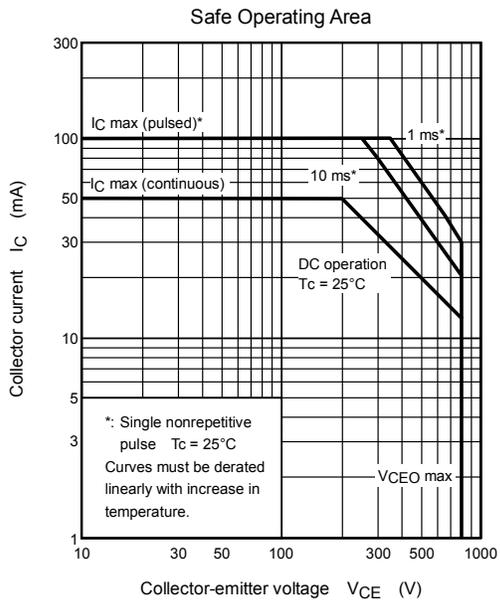
When an external heat sink is not used, Toshiba recommends that the plastic part be at least 2 mm away from its surroundings.

## Marking



A line indicates  
lead (Pb)-free package or  
lead (Pb)-free finish.





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