

TOSHIBA Transistor Silicon NPN Epitaxial Planar Type

2SC5720

MEDIUM POWER AMPLIFIER APPLICATIONS
STOROBO FLASH APPLICATIONS

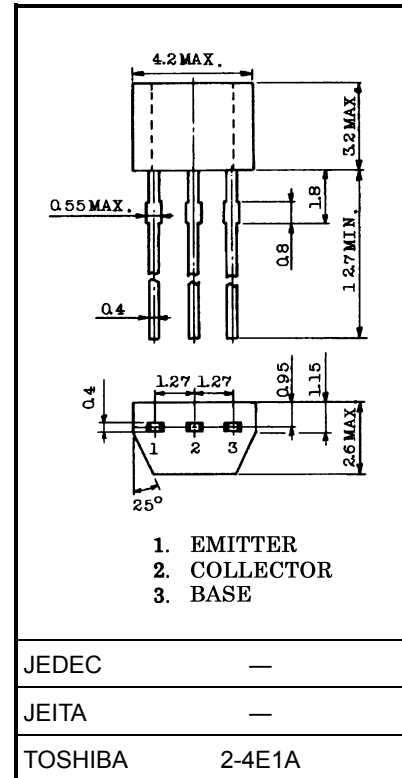
Unit: mm

- Low Saturation Voltage: $V_{CE(sat)}(I) = 0.25\text{ V (max)}$
($I_C = 3\text{ A}/I_B = 60\text{ mA}$)

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

Characteristic	Symbol	Rating	Unit
Collector-Base voltage	V_{CBO}	15	V
Collector-Emitter voltage	V_{CEO}	10	V
Emitter-Base voltage	V_{EBO}	7	V
Collector current	DC	I_C	A
	Pulsed	I_{CP}	
Collector power dissipation	P_C (Note1)	550	mW
Junction temperature	T_j	150	$^\circ\text{C}$
Storage temperature range	T_{stg}	-55 to 150	$^\circ\text{C}$

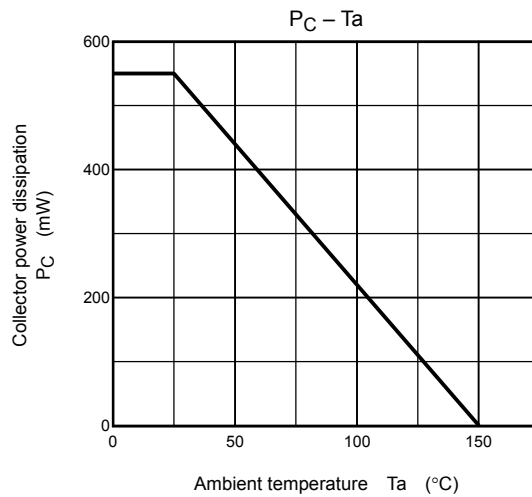
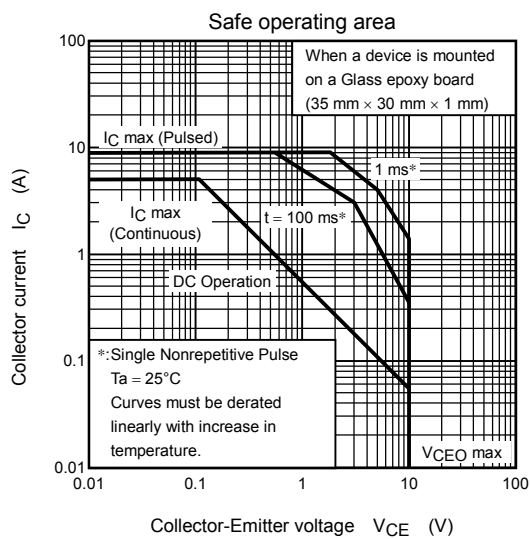
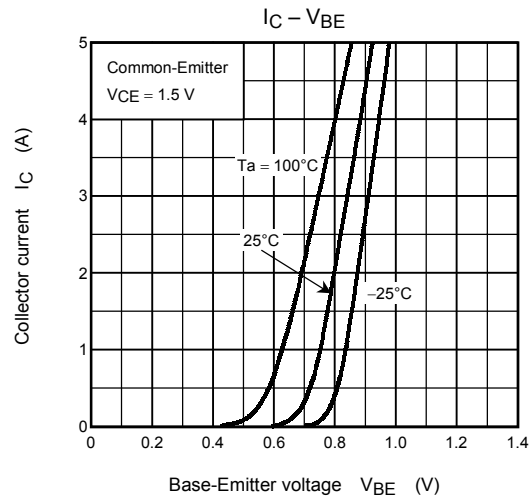
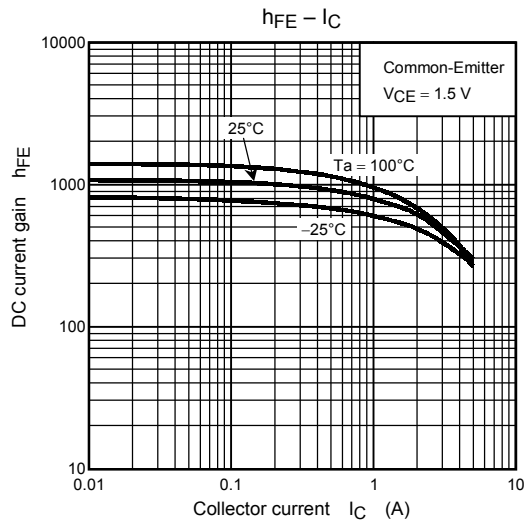
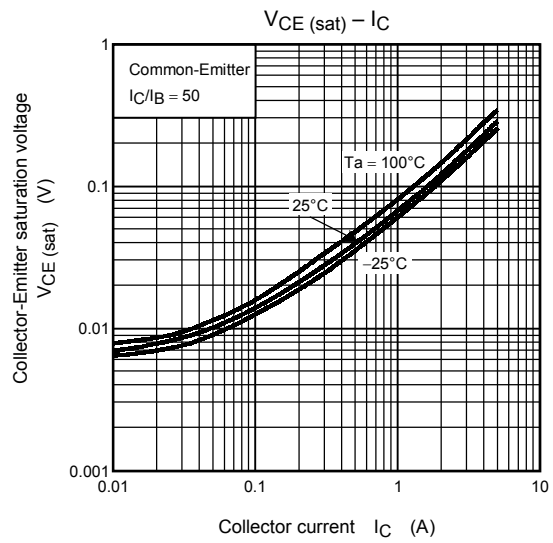
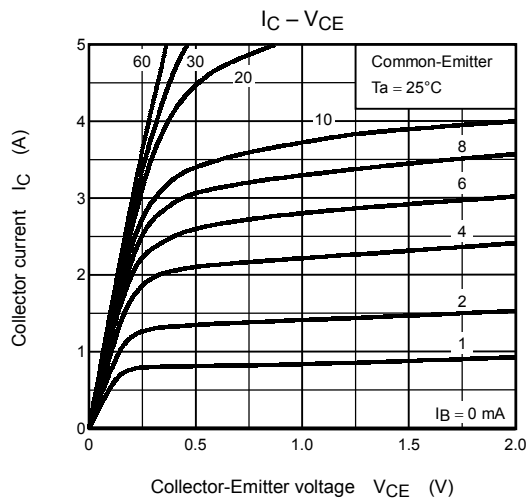
Note1: When a device is mounted on a glass epoxy board
(35 mm × 30 mm × 1mm)

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

Weight: 0.13 g (typ.)

Characteristic	Symbol	Test Condition	Min	Typ.	Max	Unit
Collector cut-off current	I_{CBO}	$V_{CB} = 15\text{ V}, I_E = 0$	—	—	0.1	μA
Emitter cut-off current	I_{EBO}	$V_{EB} = 5\text{ V}, I_C = 0$	—	—	0.1	μA
Collector-Emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = 1\text{ mA}, I_B = 0$	10	—	—	V
DC current gain	$h_{FE(1)}$ (Note2)	$V_{CE} = 1.5\text{ V}, I_C = 0.5\text{ A}$	700	—	2000	
	$h_{FE(2)}$ (Note2)	$V_{CE} = 1.5\text{ V}, I_C = 2\text{ A}$	450	—	—	
	$h_{FE(3)}$ (Note2)	$V_{CE} = 1.5\text{ V}, I_C = 5\text{ A}$	240	—	—	
Collector-Emitter saturation voltage	$V_{CE(sat)}$ (Note2)	$I_C = 3\text{ A}, I_B = 60\text{ mA}$	—	—	0.25	V
Collector output capacitance	C_{ob}	$V_{CB} = 10\text{ V}, I_E = 0, f = 1\text{ MHz}$	—	30	—	pF

Note2: Pulse test



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