

TOSHIBA Transistor Silicon NPN Epitaxial Planar Type

2SC5720

MEDIUM POWER AMPLIFIER APPLICATIONS
STOROBO FLASH APPLICATIONS

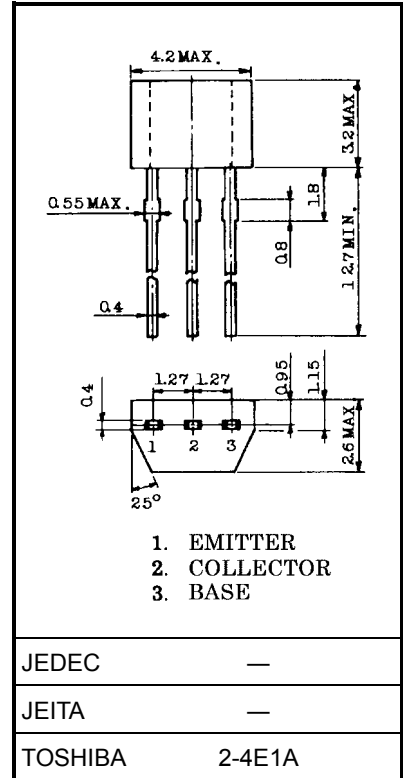
Unit: mm

- Low Saturation Voltage: $V_{CE(sat)}(1) = 0.25 \text{ V (max)}$
($I_C = 3 \text{ A}/I_B = 60 \text{ mA}$)

Maximum Ratings (Ta = 25°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	5
	Pulsed	I_{CP}	9
Collector power dissipation	P_C (Note1)	550	mW
Junction temperature	T_j	150	°C
Storage temperature range	T_{stg}	-55 to 150	°C

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

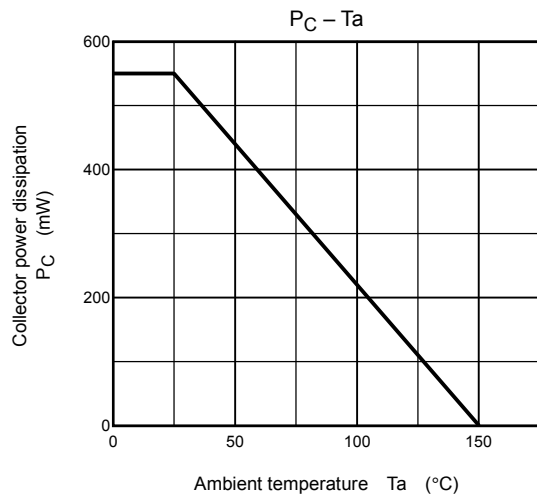
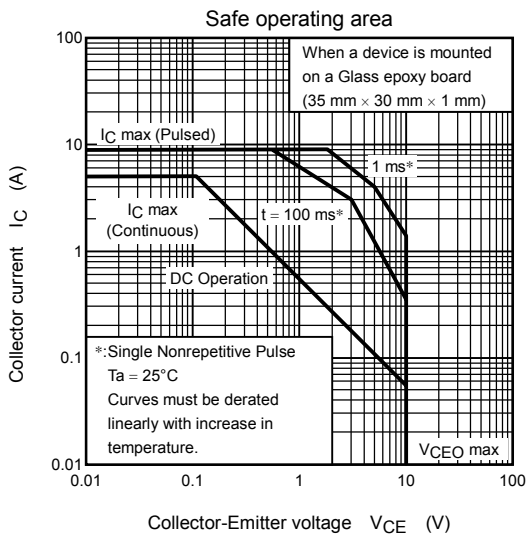
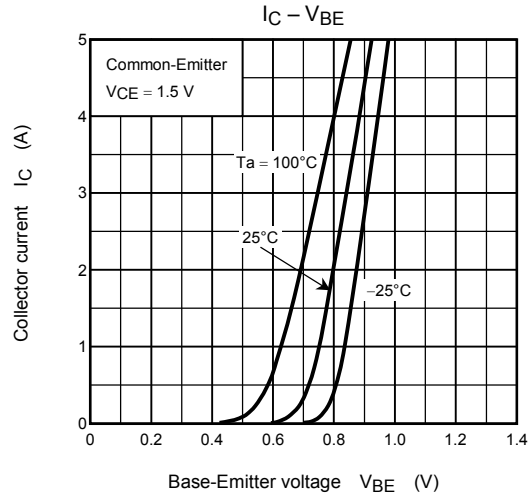
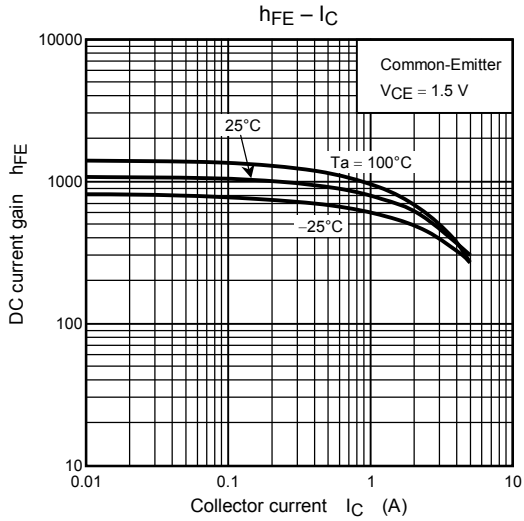
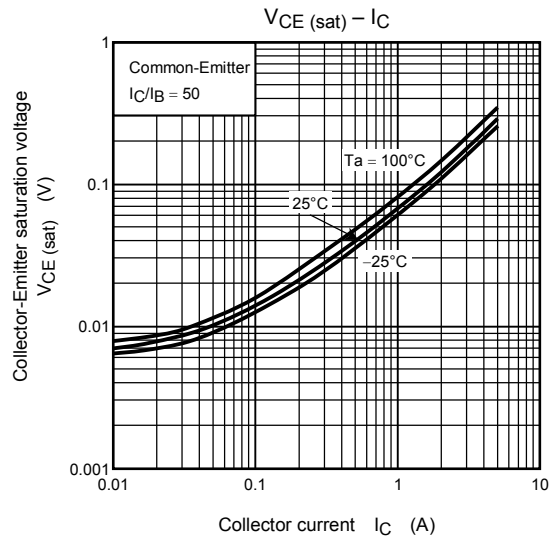
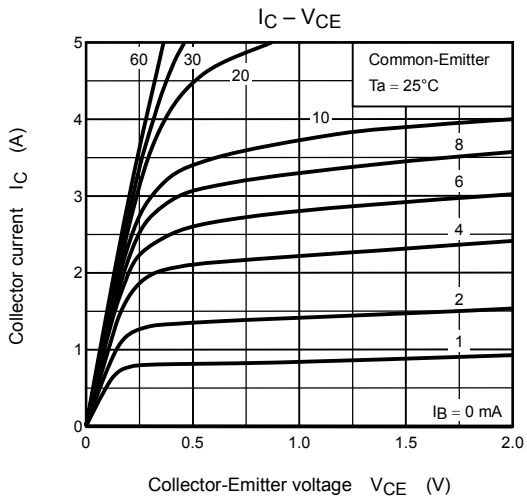


Electrical Characteristics (Ta = 25°C)

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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