Unit: mm

TOSHIBA Transistor Silicon PNP Epitaxial Type (PCT process)

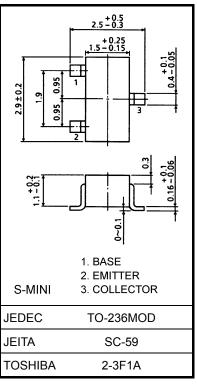
2SA1721

High Voltage Control Applications
Plasma Display, Nixie Tube Driver Applications
Cathode Ray Tube Brightness Control Applications

- High voltage: $V_{CBO} = -300 \text{ V}$, $V_{CEO} = -300 \text{ V}$
- Low saturation voltage: $V_{CE (sat)} = -0.5 \text{ V (max)}$
- Small collector output capacitance: $C_{ob} = 5.5 \text{ pF (typ.)}$
- Complementary to 2SC4497

Absolute Maximum Ratings (Ta = 25°C)

Characteristics	Symbol	Rating	Unit
Collector-base voltage	V_{CBO}	-300	V
Collector-emitter voltage	V _{CEO}	-300	V
Emitter-base voltage	V _{EBO}	-5	V
Collector current	IC	-100	mA
Base current	ΙΒ	-20	mA
Collector power dissipation	PC	150	mW
Junction temperature	Tj	150	°C
Storage temperature range	T _{stg}	-55 to 150	°C

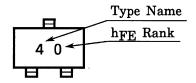


Weight: 0.012 g (typ.)

Note: 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).

Marking



2SA1721

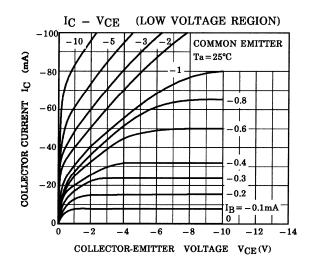


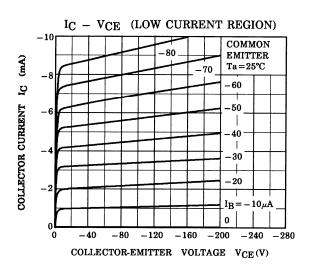
Electrical Characteristics (Ta = 25°C)

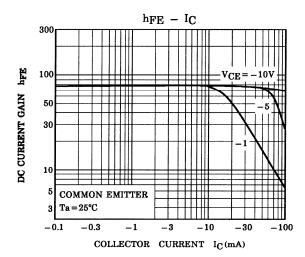
Characteristics	Symbol	Test Condition	Min	Тур.	Max	Unit
Collector cut-off current	I _{CBO}	$V_{CB} = -300 \text{ V}, I_E = 0$	_	_	-0.1	μА
Emitter cut-off current	I _{EBO}	$V_{EB} = -5 \text{ V}, I_C = 0$	_	_	-0.1	μА
Collector-base breakdown voltage	V (BR) CBO	$I_C = -0.1 \text{ mA}, I_E = -0$	-300	_	_	٧
Collector-emitter breakdown voltage	V (BR) CEO	$I_C = -1 \text{ mA}, I_B = -0$	-300	_	_	٧
DC current gain	h _{FE (1)} (Note)	$V_{CE} = -10 \text{ V}, I_{C} = -20 \text{ mA}$	30	_	150	
	h _{FE (2)}	$V_{CE} = -10 \text{ V}, I_{C} = -1 \text{ mA}$	20	_	_	
Collector-emitter saturation voltage	V _{CE} (sat)	$I_C = -20 \text{ mA}, I_B = -2 \text{ mA}$	_	_	-0.5	٧
Base-emitter saturation voltage	V _{BE} (sat)	$I_C = -20 \text{ mA}, I_B = -2 \text{ mA}$	_	_	-1.2	V
Transition frequency	f _T	$V_{CE} = -10 \text{ V}, I_{C} = -20 \text{ mA}$	50	55	_	MHz
Collector output capacitance	C _{ob}	$V_{CB} = -20 \text{ V}, I_{E} = 0, f = 1 \text{ MHz}$	_	5.5	6.0	pF

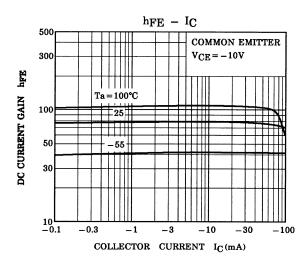
Note: $h_{FE\ (1)}$ classification R: 30 to 90, O: 50 to 150

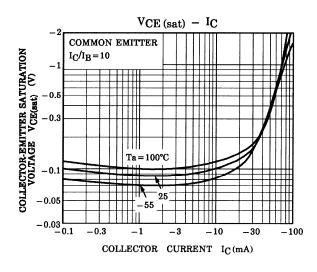
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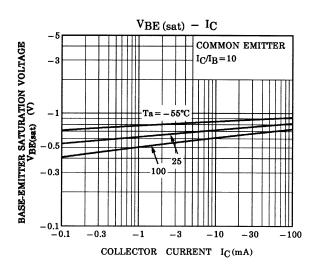




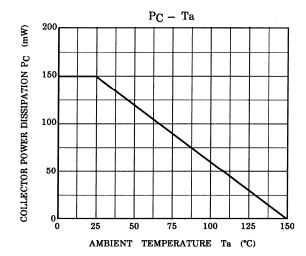








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