TOSHIBA Transistor Silicon PNP Epitaxial Type (PCT Process)

2SA2154

General-Purpose Amplifier Applications

• High voltage and high current

: $V_{CEO} = -50 \text{ V}$, $I_{C} = -100 \text{ mA (max)}$

Excellent h_{FE} linearity

: $h_{FE} (I_C = -0.1 \text{ mA})/h_{FE} (I_C = -2 \text{ mA}) = 0.95 \text{ (typ.)}$

• High h_{FE} : h_{FE} = 120~400

• Complementary to 2SC6026

• Lead (Pb) free

Maximum Ratings (Ta = 25°C)

Characteristic	Symbol	Rating	Unit
Collector-base voltage	V_{CBO}	-50	V
Collector-emitter voltage	V_{CEO}	-50	V
Emitter-base voltage	V _{EBO}	-5	V
Collector current	Ic	-100	mA
Base current	Ι _Β	-30	mA
Collector power dissipation	P _C	50	mW
Junction temperature	Tj	150	COLL
Storage temperature range	T _{stg}	-55~150	°C

2 0.8±0.05 1.0±0.05 0.1±0.05 1.BASE 2.EMITTER

Unit: mm

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fSM 3.COLLECTOR

JEDEC —

JEITA —

TOSHIBA 2-1E1A

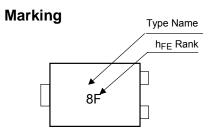
Weight: 0.0006 g (typ.)

Electrical Characteristics (Ta = 25°C)

Characteristic	Symbol	Test Condition	Min	Тур.	Max	Unit
Collector cutoff current	I _{CBO}	$V_{CB} = -50 \text{ V}, I_E = 0$	_	_	-0.1	μА
Emitter cutoff current	I _{EBO}	$V_{EB} = -5 \text{ V}, I_C = 0$	_	_	-0.1	μА
DC current gain	h _{FE} (Note)	$V_{CE} = -6 \text{ V}, I_C = -2 \text{ mA}$	120	_	400	_
Collector-emitter saturation voltage	V _{CE (sat)}	$I_C = -100 \text{ mA}, I_B = -10 \text{ mA}$	_	-0.18	-0.3	V
Transition frequency	f _T	$V_{CE} = -10 \text{ V}, I_{C} = -1 \text{ mA}$	80	_		MHz
Collector output capacitance	C _{ob}	$V_{CB} = -10 \text{ V}, I_E = 0, f = 1 \text{ MHz}$	_	1.6	_	pF

Note: hFE classification Y (F): 120~240, GR (H): 200~400

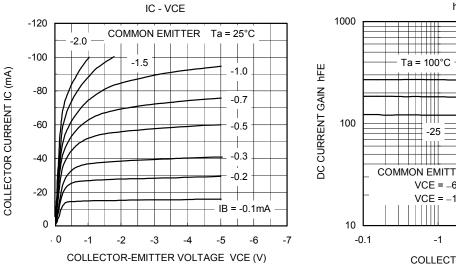
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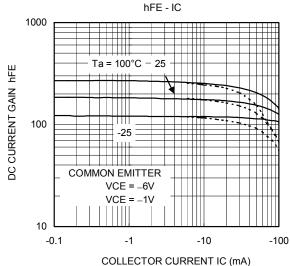


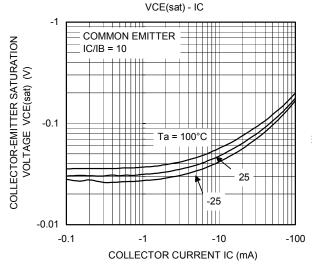
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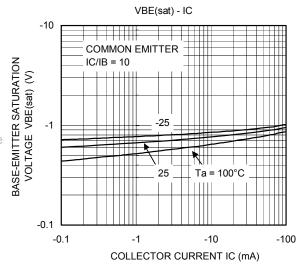
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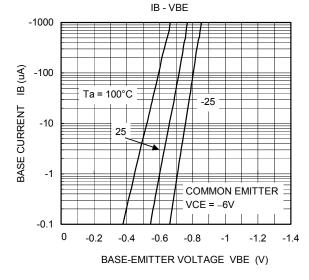
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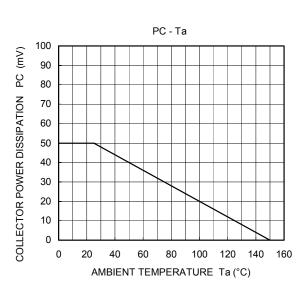












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