Unit: mm

TOSHIBA Transistor Silicon NPN Epitaxial Type (PCT Process)

HN2C01FE

Audio Frequency General Purpose Amplifier Applications

Small package (dual type)

High voltage and high current : $V_{CEO} = 50V$, $I_C = 150mA$ (max)

High hFE : h_{FE} = 120~400

Excellent hFE linearity $: h_{FE} (I_C = 0.1 mA) / (I_C = 2 mA)$

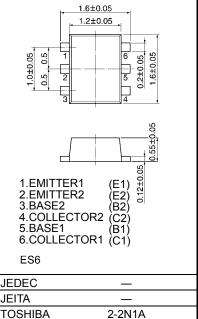
= 0.95 (typ.)

Maximum Ratings (Ta = 25°C) (Q1, Q2 Common)

Characteristic	Symbol	Rating	Unit
Collector-base voltage	V _{CBO}	60	V
Collector-emitter voltage	V _{CEO}	50	V
Emitter-base voltage	V _{EBO}	5	V
Collector current	IC	150	mA
Base current	I _B	30	mA
Collector power dissipation	P _C *	100	mW
Junction temperature	Tj	150	°C
Storage temperature range	T _{stg}	<i>–</i> 55∼150	°C

^{*} Total rating

1.6±0.05 1.2±0.05



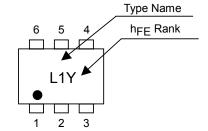
Weight: 3mg

Electrical Characteristics (Ta = 25°C) (Q1, Q2 Common)

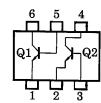
Characteristic	Symbol	Test Circuit	Test Condition	Min	Тур.	Max	Unit
Collector cut-off current	I _{CBO}	_	V _{CB} = 60V, I _E = 0	_	_	0.1	μA
Emitter cut-off current	I _{EBO}	_	V _{EB} = 5V, I _C = 0		-	0.1	μA
DC current gain	h _{FE (Note)}	_	V_{CE} = 6V, I_C = 2mA	120	ı	400	ı
Collector-emitter saturation voltage	V _{CE (sat)}	_	I _C = 100mA, I _B =10mA	_	0.1	0.25	٧
Transition frequency	f _T	_	V _{CE} = 10V, I _C = 1mA	60	_	_	MHz
Collector output capacitance	C _{ob}	_	$V_{CB} = 10V, I_E = 0, f = 1MH_Z$	_	2	_	pF

Note: hFE classification Y(Y): 120~240, GR(G): 200~400 () marking symbol

Marking

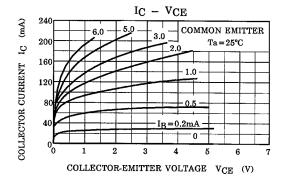


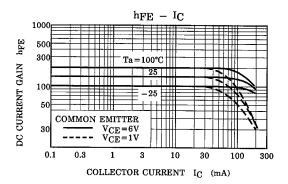
Equivalent Circuit (Top View)

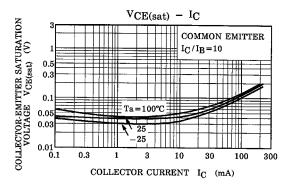


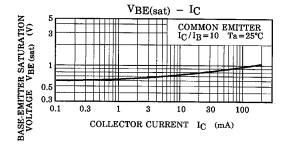
2004-03-11

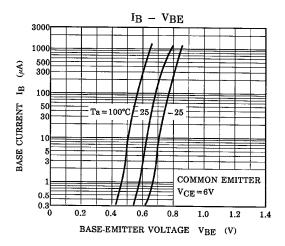
(Q1, Q2 Common)

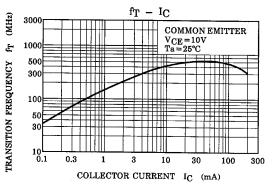


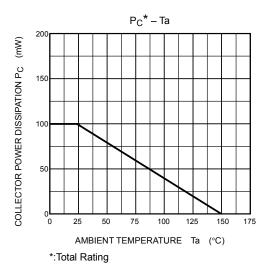












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