Unit: mm

TOSHIBA Transistor Silicon PNP Epitaxial Type (PCT Process)

HN2A01FE

Audio Frequency General Purpose Amplifier Applications

Small package (dual type)

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

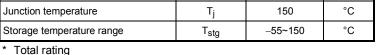
High hFE : h_{FE} = 120~400

Excellent hFE linearity

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

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

Characteristic	Symbol	Rating	Unit	
Collector-base voltage	V _{CBO}	-50	٧	
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}	-55~150	°C	



1.6±0.05 1.2±0.05 0.2±0.05 1.6±0.05 0.5 1.EMITTER1

6.COLLECTOR1 ES6 JEDEC JEITA TOSHIBA 2-2N1A

Weight: 3.0mg

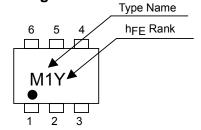
2.EMITTER2 3.BASE2 4.COLLECTOR2

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

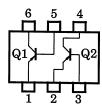
Characteristic	Symbol	Test Circuit	Test Condition	Min	Тур.	Max	Unit
Collector cut-off current	I _{CBO}	_	$V_{CB} = -50V, I_E = 0$	_	_	-0.1	μΑ
Emitter cut-off current	I _{EBO}	_	$V_{EB} = -5V, I_C = 0$	_	_	-0.1	μΑ
DC current gain	h _{FE (Note)}	_	$V_{CE} = -6V, I_{C} = -2mA$	120	_	400	_
Collector-emitter saturation voltage	V _{CE (sat)}	_	I _C = -100mA, I _B = -10mA	_	-0.1	-0.3	V
Transition frequency	f _T	_	$V_{CE} = -10V, I_{C} = -1mA$	80	_	_	MH_z
Collector output capacitance	C _{ob}	_	$V_{CB} = -10V$, $I_E = 0$, $f = 1MH_z$	_	4	_	pF

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

Marking

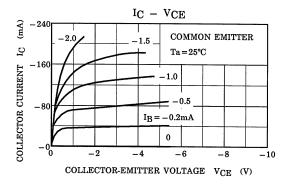


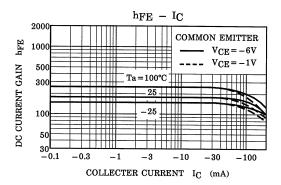
Equivalent Circuit (Top View)

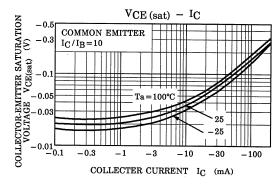


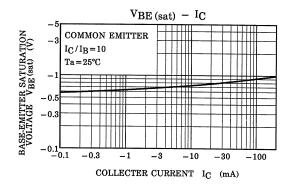
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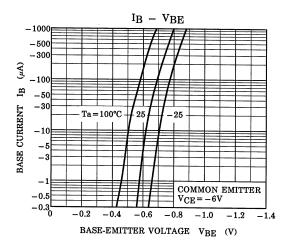
(Q1, Q2 Common)

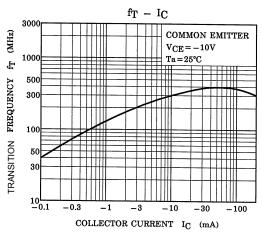


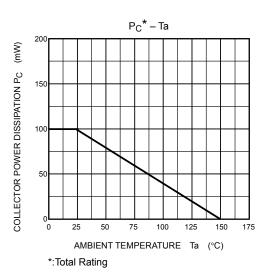












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