TOSHIBA Transistor Silicon NPN Epitaxial Type (PCT Process)

RN1410,RN1411

Switching, Inverter Circuit, Interface Circuit And Driver Circuit Applications

- With built-in bias resistors
- Simplify circuit design
- Reduce a quantity of parts and manufacturing process
- Complementary to RN2410, RN2411

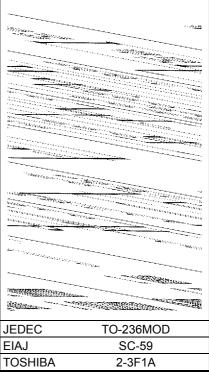
Equivalent Circuit



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
Collector power dissipation	PC	200	mW
Junction temperature	Tj	150	°C
Storage temperature range	T _{stg}	-55~125	°C

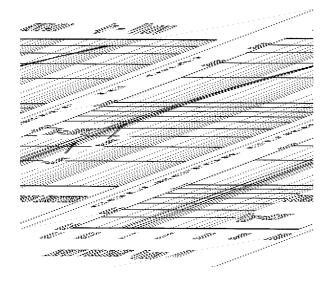
Unit: mm

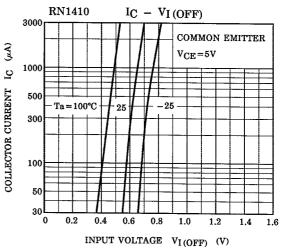


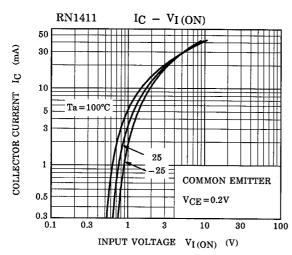
Weight: 0.012g

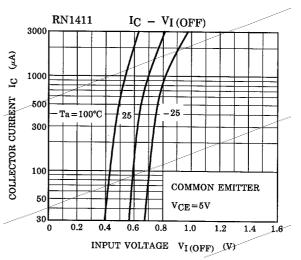
Electrical Characteristics (Ta = 25°C)

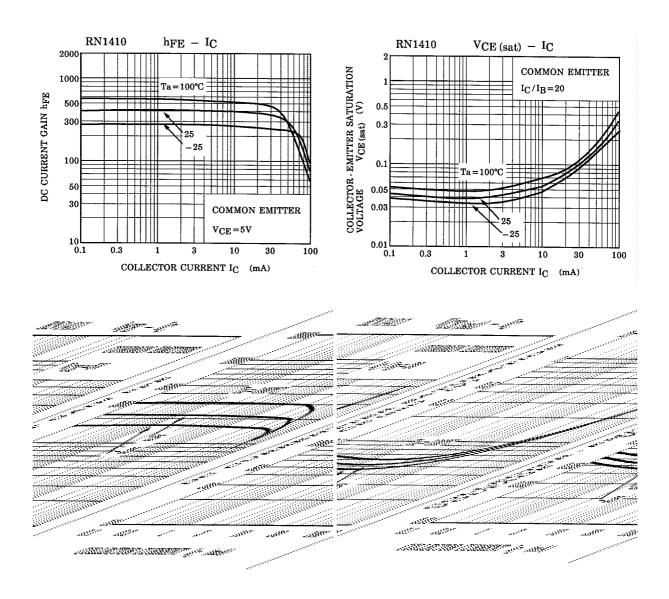
Characteristic		Symbol	Test Circuit	Test Condition	Min	Тур.	Max	Unit
Collector cut-off current		I _{CBO}	_	V _{CB} = 50V, I _E = 0	_	_	100	nA
Emitter cut-off current		I _{EBO}	_	V _{EB} = 5V, I _C = 0	_	_	100	nA
DC current gain		h _{FE}	_	V _{CE} = 5V, I _C = 1mA	120	_	700	
Collector-emitter saturation voltage		V _{CE (sat)}	_	I _C = 5mA, I _B = 0.25mA	_	0.1	0.3	V
Transition frequency		f _T	_	V _{CE} = 10V, I _C = 5mA	_	250	_	MHz
Collector output capacitance		C _{ob}	_	V _{CB} = 10V, I _E = 0, f = 1MHz	_	3	6	pF
Input resistor	RN1410	- R1	_	_	3.29	4.7	6.11	kΩ
	RN1411				7	10	13	











Type Name	Marking	
RN1410		
RN1411		

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