Unit: mm

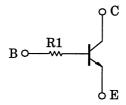
TOSHIBA Transistor Silicon NPN Epitaxial Type (PCT Process)

RN1010,RN1011

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 RN2010~RN2011

Equivalent Circuit



Maximum Ratings (Ta = 25°C)

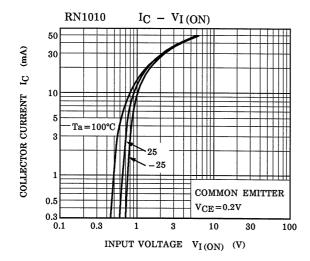
Characteristic	Symbol	Rating	Unit
Collector-base voltage	V_{CBO}	50	V
Collector-emitter voltage	V_{CEO}	50	V
Emitter-base voltage	V _{EBO}	5	V
Collector current	Ic	100	mA
Collector power dissipation	P _C *	400	mW
Junction temperature	Tj	150	°C
Storage temperature range	T _{stg}	-55~125	°C

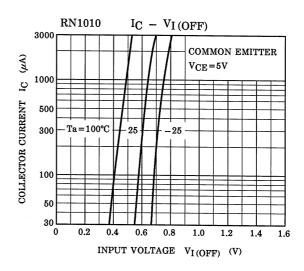
1. EMITTER 2. COLLECTPR 3. BASE JEDEC TO-92 EIAJ SC-43 TOSHIBA 2-5F1B

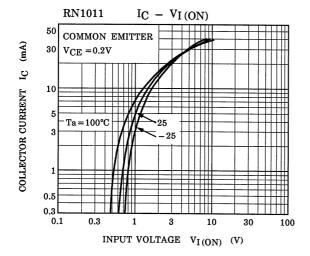
Weight: 0.21g

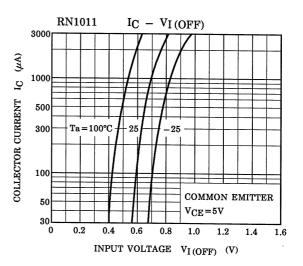
Electrical Characteristics (Ta = 25°C)

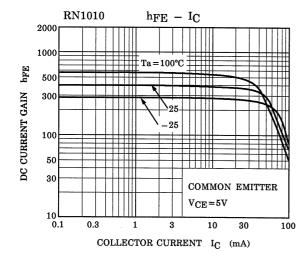
Characteristic		Symbol	Test Circuit	Test Condition	Min	Тур.	Max	Unit
Collector cut-off current		I _{CBO}	_	V _{CB} = 50V, I _E = 0	_	_	100	nA
Emitter cut-off current		I _{EBO}	_	V _{EB} = 5V, I _C = 0	_	_	100	nA
DC current gain		h _{FE}	_	V _{CE} = 5V, I _C = 1mA	120	_	700	
Collector-emitter saturation 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	_	MH_Z
Collector output capacitance		C _{ob}	_	V _{CB} = 10V, I _E = 0, f = 1MH _z	_	3	6	pF
Input resistor	RN1010	- R1 —			3.29	4.7	6.11	kΩ
	RN1011				7	10	13	N3.2

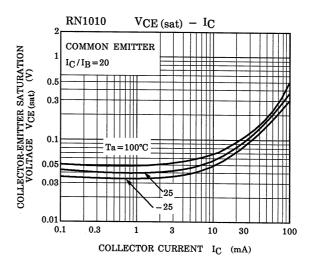


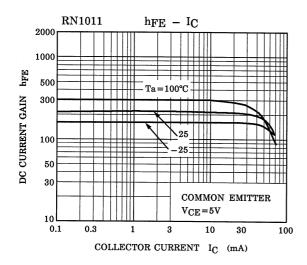


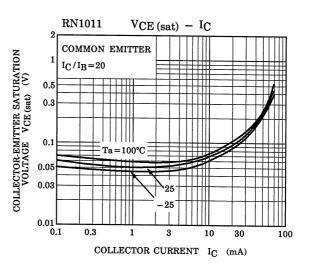












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