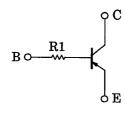
TOSHIBA Transistor Silicon PNP Epitaxial Type (PCT Process)

# RN2710,RN2711

Switching, Inverter Circuit, Interface Circuit And Driver Circuit Applications

- Including two devices in USV (ultra super mini type with 5 leads)
- With built-in bias resistors
- Simplify circuit design
- Reduce a quantity of parts and manufacturing process
- Complementary to RN1710~RN1711

### **Equivalent Circuit**

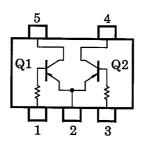


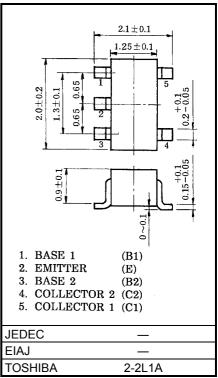
#### Maximum Ratings (Ta = 25°C)

Characterisstic	Symbol	Rating	Unit
Collector-base voltage	V <sub>CBO</sub>	-50	V
Collector-emitter voltage	V <sub>CEO</sub>	-50	V
Emitter-base voltage	V <sub>EBO</sub>	-5	V
Collector current	Ι <sub>C</sub>	-100	mA
Collector power dissipation	P <sub>C</sub> *	200	mW
Junction temperature	Tj	150	°C
Storage temperature range	T <sub>stg</sub>	-55~150	°C

\* : Total rating

#### **Equivalent Circuit (Top View)**





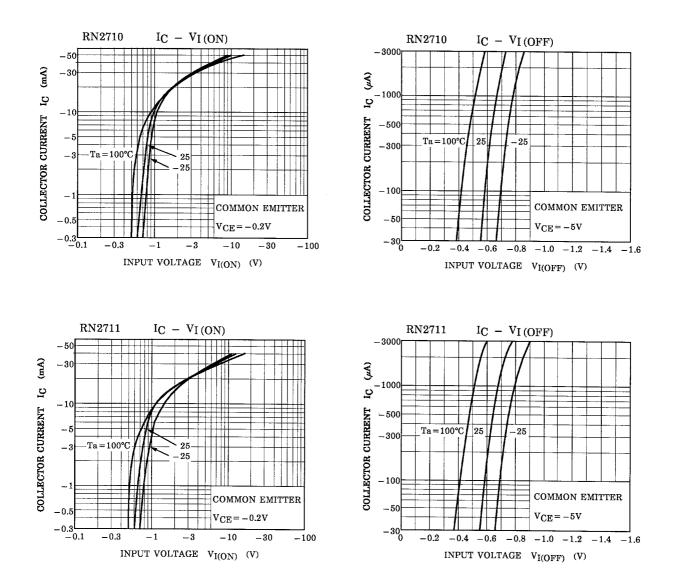
Weight: 6.2mg

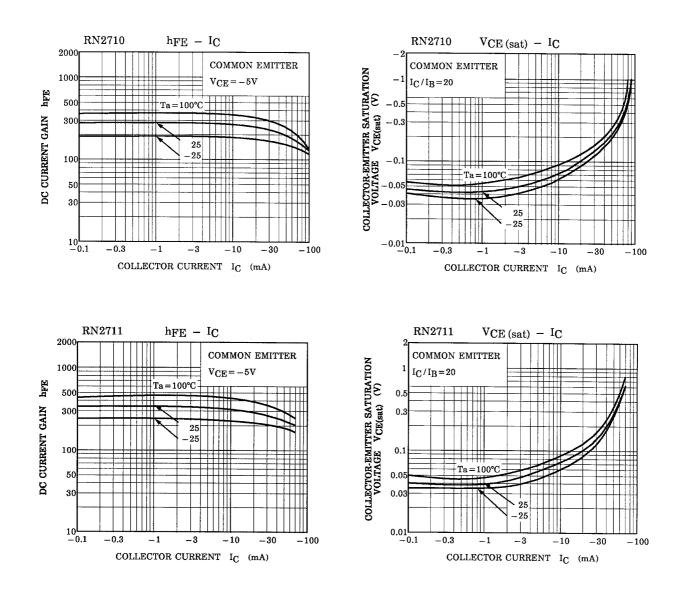
Unit: mm

Electrical Characteristics (Ta = 25°C)

Characteristic		Symbol	Test Circuit	Test Condition	Min	Тур.	Max	Unit
Collector cut-off current		I <sub>CBO</sub>	-	$V_{CB} = -50V, I_E = 0$	_	_	-100	nA
Emitter cut-off current		I <sub>EBO</sub>	—	V <sub>EB</sub> = -5V, I <sub>C</sub> = 0		—	-100	nA
DC current gain		h <sub>FE</sub>	_	V <sub>CE</sub> = −5V, I <sub>C</sub> = −1mA	120	_	400	_
Collector-emitter saturation voltage		V <sub>CE (sat)</sub>	—	I <sub>C</sub> = −5mA, I <sub>B</sub> = −0.25mA	_	-0.1	-0.3	V
Translation frequency		f <sub>T</sub>	—	V <sub>CE</sub> = −10V, I <sub>C</sub> = −5mA	_	200	_	MHz
Collector output capacitance		C <sub>ob</sub>	—	V <sub>CB</sub> = −10V, I <sub>E</sub> = 0, f = 1MHz	_	3	6	pF
Input resistor	RN2710				3.29	4.7	6.11	kΩ
	RN2711		—	7	10	13	K12	

## **TOSHIBA**





Type Name	Marking	
RN2710	Type Name Y K HHH	
RN2711	Type Name Y M EEE	

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