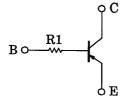
TOSHIBA Transistor Silicon PNP Epitaxial Type (PCT Process)

# 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**

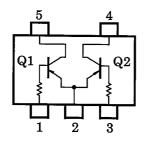


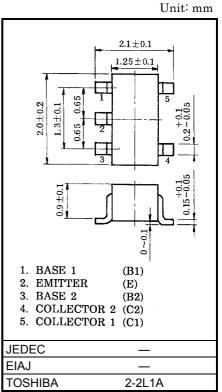
### **Maximum Ratings (Ta = 25°C)**

Characterisstic	Symbol	Rating	Unit
Collector-base voltage	$V_{CBO}$	-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 <sub>C</sub> *	200	mW
Junction temperature	Tj	150	°C
Storage temperature range	T <sub>stg</sub>	-55~150	°C

<sup>\*:</sup> Total rating

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





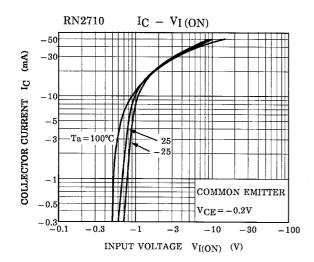
Weight: 6.2mg

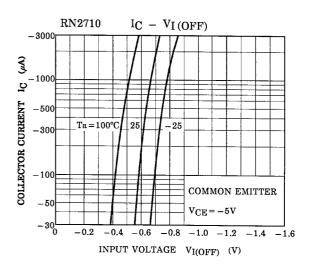


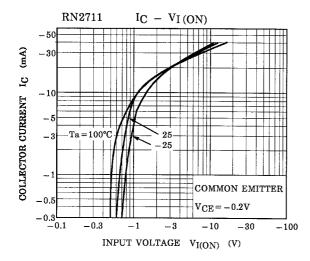
### Electrical Characteristics (Ta = 25°C)

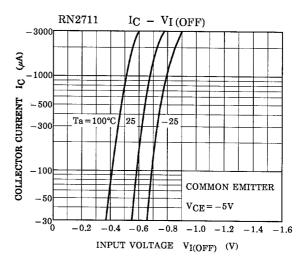
Characteristic		Symbol	Test Circuit	Test Condition	Min	Тур.	Max	Unit
Collector cut-off current		I <sub>CBO</sub>	_	$V_{CB} = -50V, I_{E} = 0$	_	_	-100	nA
Emitter cut-off current		I <sub>EBO</sub>	_	$V_{EB} = -5V$ , $I_C = 0$	1	-	-100	nA
DC current gain		h <sub>FE</sub>	_	$V_{CE} = -5V, I_{C} = -1mA$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

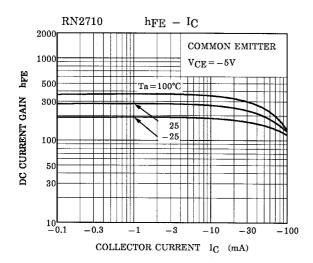
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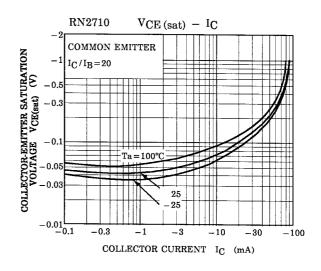


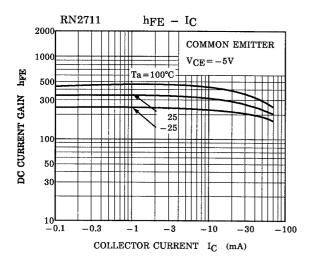


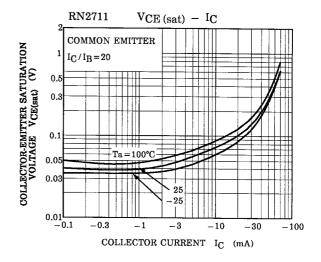












Type Name	Marking	
RN2710	Type Name Y K	
RN2711	Type Name Y M	

2001-06-07

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