

TOSHIBA

RN2110F, RN2111F

TOSHIBA TRANSISTOR SILICON PNP EPITAXIAL TYPE (PCT PROCESS)

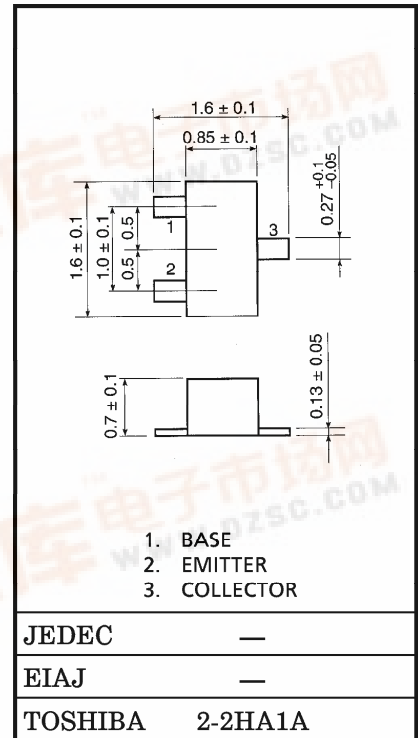
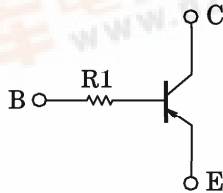
RN2110F, RN2111F

SWITCHING, INVERTER CIRCUIT, INTERFACE CIRCUIT
AND DRIVER CIRCUIT APPLICATIONS.

Unit in mm

- With Built-in Bias Resistors
- Simplify Circuit Design
- Reduce a Quantity of Parts and Manufacturing Process
- Complementary to RN1110F, RN1111F

EQUIVALENT CIRCUIT



MAXIMUM RATINGS (Ta = 25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	V _{CB0}	-50	V
Collector-Emitter Voltage	V _{CEO}	-50	V
Emitter-Base Voltage	V _{EBO}	-5	V
Collector Current	I _C	-100	mA
Collector Power Dissipation	P _C	100	mW
Junction Temperature	T _j	150	°C
Storage Temperature Range	T _{stg}	-55~150	°C

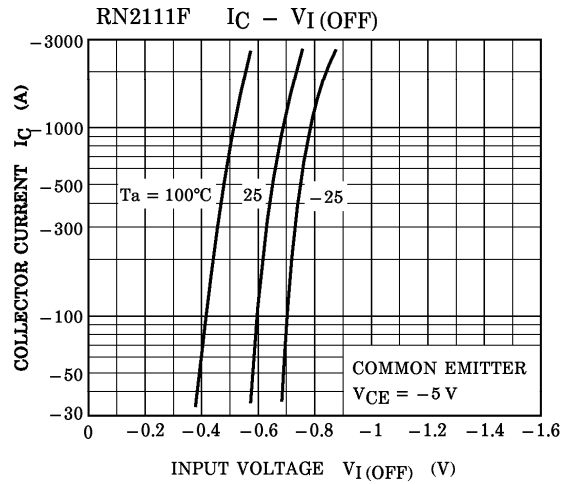
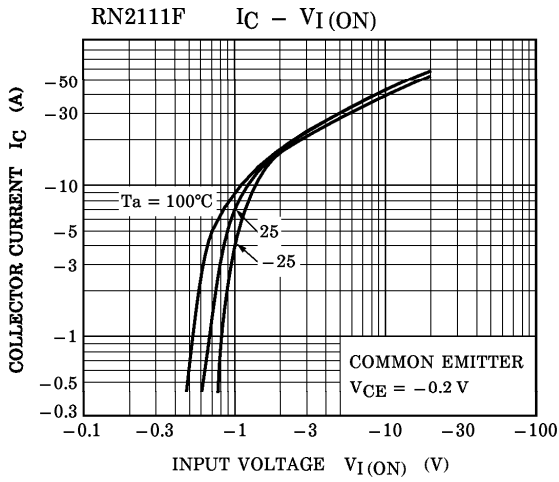
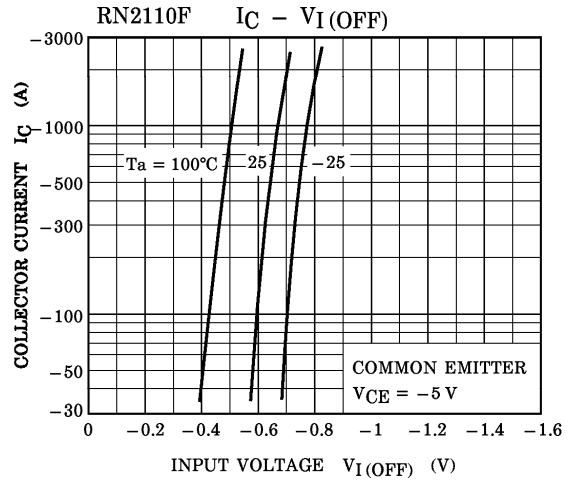
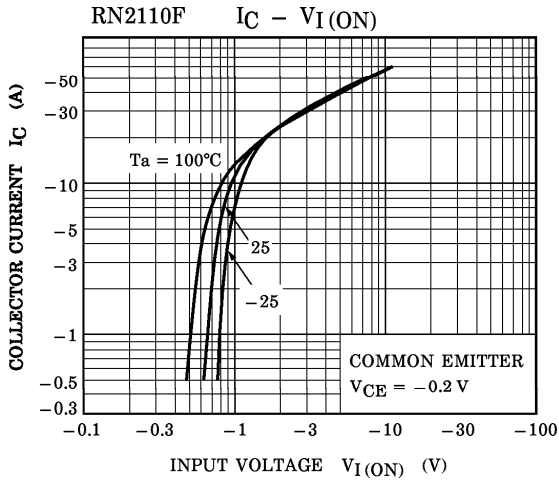
ELECTRICAL CHARACTERISTICS (Ta = 25°C)

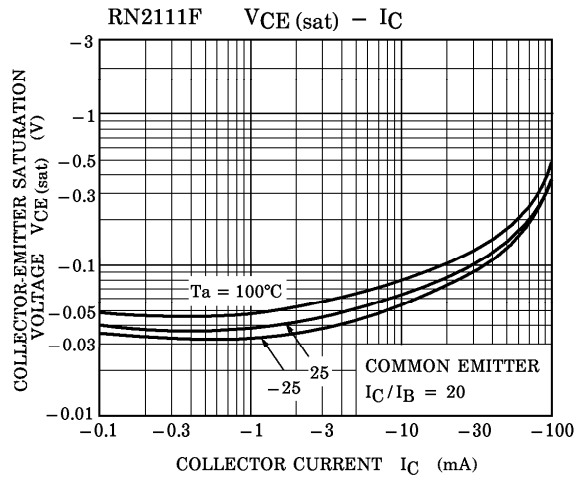
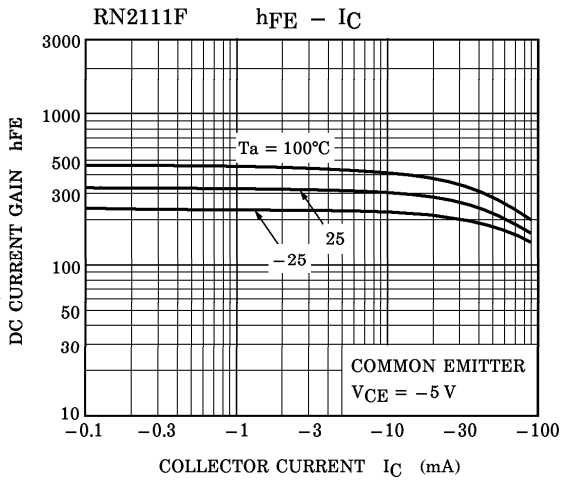
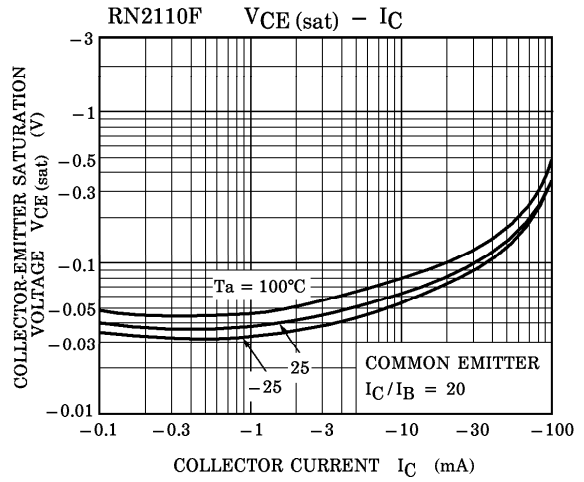
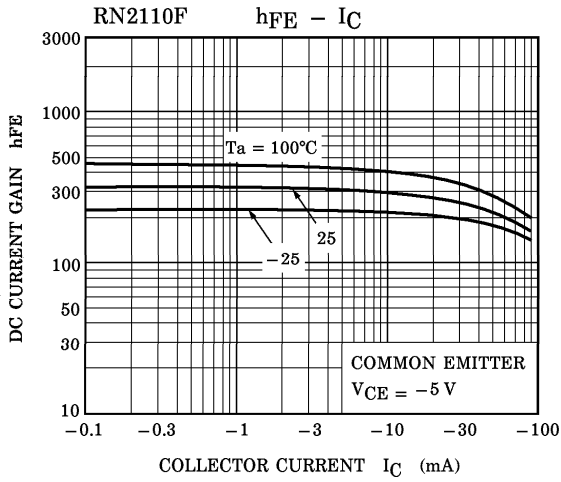
CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I _{CBO}	V _{CB} = -50 V, I _E = 0	—	—	-100	nA
Emitter Cut-off Current	I _{EBO}	V _{EB} = -5 V, I _C = 0	—	—	-100	nA
DC Current Gain	h _{FE}	V _{CE} = -5 V, I _C = -1 mA	120	—	400	
Collector-Emitter Saturation Voltage	V _{CE (sat)}	I _C = -5 mA, I _B = -0.25 mA	—	-0.1	-0.3	V
Transition Frequency	f _T	V _{CE} = -10 V, I _C = -5 mA	—	200	—	MHz
Collector Output Capacitance	C _{ob}	V _{CB} = -10 V, I _E = 0, f = 1 MHz	—	3	6	pF
Input Resistor	RN2111F	R1	3.29	4.7	6.11	kΩ
	RN2110F		7	10	13	

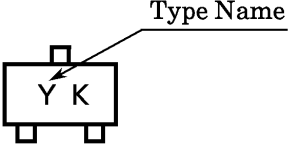
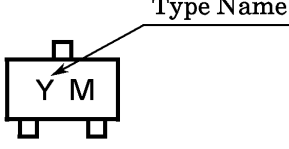
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TYPE NAME	MARKING
RN2110F	 A diagram of a rectangular component with a small square protrusion on top and two small square protrusions on the bottom. Inside the rectangle, the letters 'Y K' are printed. An arrow points from the text 'Type Name' to the 'Y' in 'Y K'.
RN2111F	 A diagram of a rectangular component with a small square protrusion on top and two small square protrusions on the bottom. Inside the rectangle, the letters 'Y M' are printed. An arrow points from the text 'Type Name' to the 'Y' in 'Y M'.