

TOSHIBA TRANSISTOR SILICON PNP EPITAXIAL TYPE (PCT PROCESS)

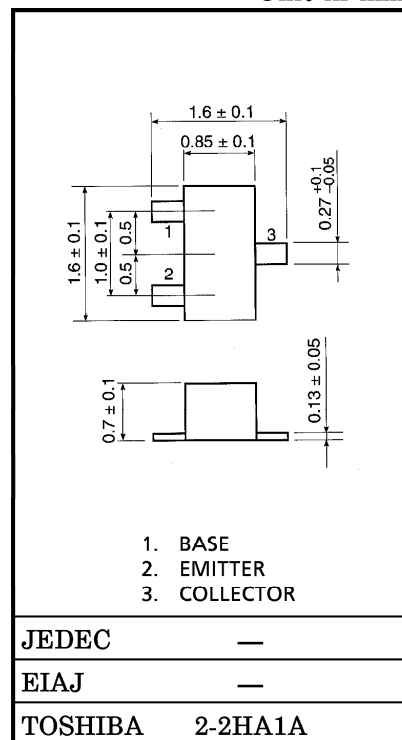
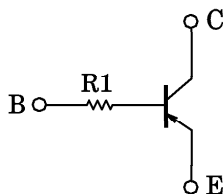
RN2110F, RN2111F

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)

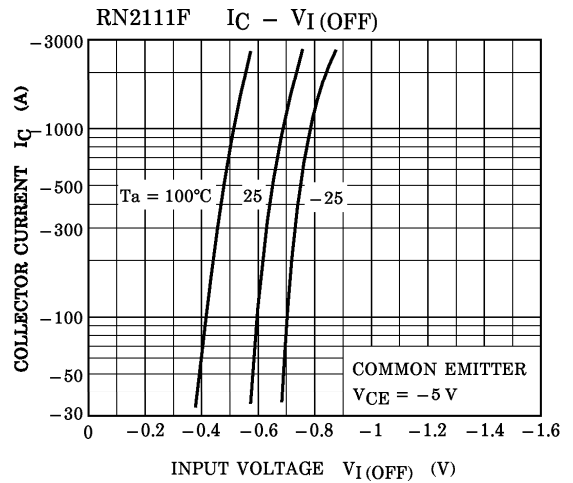
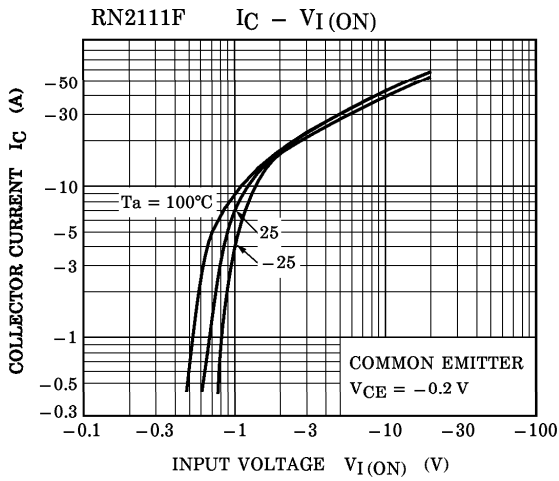
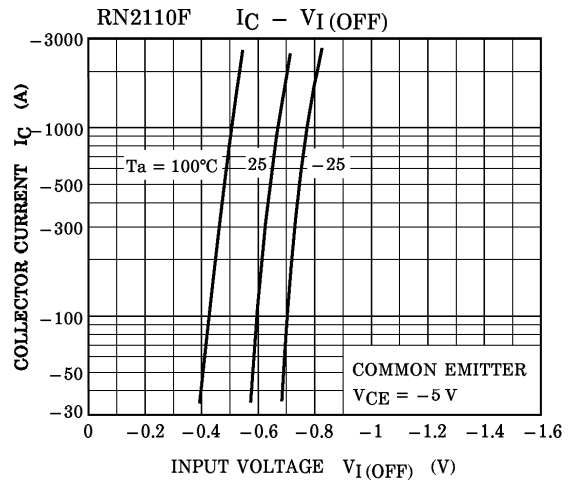
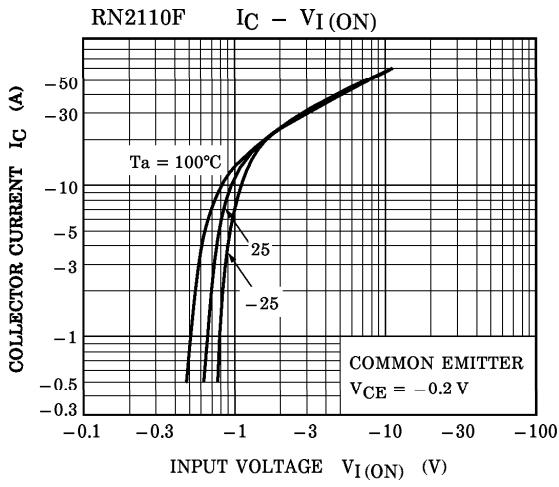
CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	V _{CB0}	-50	V
Collector-Emitter Voltage	V _{CEO}	-50	V
Emitter-Base Voltage	V _{EBO}	-5	V
Collector Current	I _C	-100	mA
Collector Power Dissipation	P _C	100	mW
Junction Temperature	T _j	150	°C
Storage Temperature Range	T _{stg}	-55~150	°C

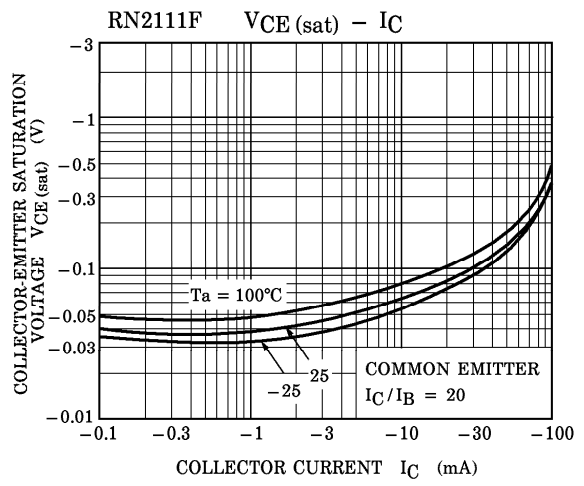
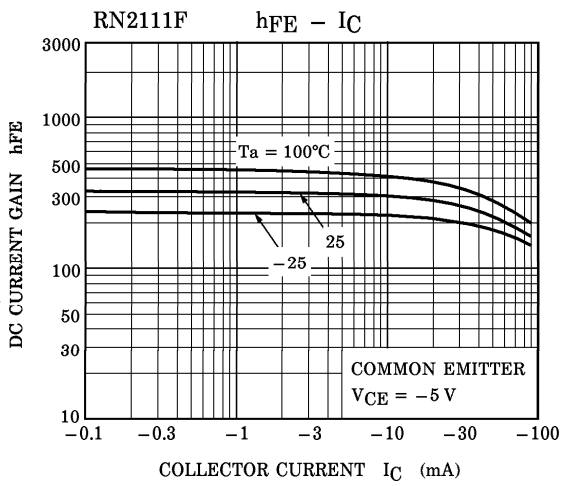
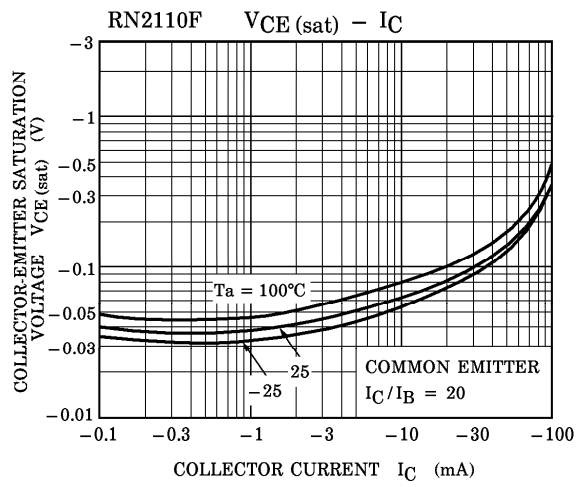
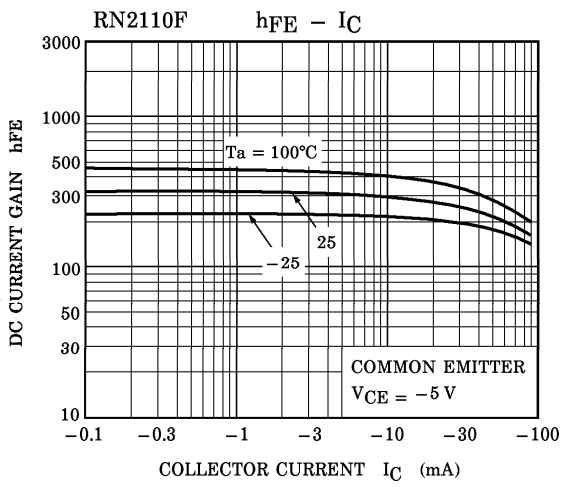
ELECTRICAL CHARACTERISTICS (Ta = 25°C)

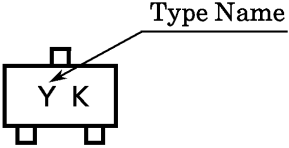
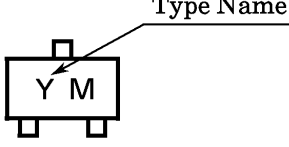
CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT	
Collector Cut-off Current	I _{CB0}	V _{CB} = -50 V, I _E = 0	—	—	-100	nA	
Emitter Cut-off Current	I _{EBO}	V _{EB} = -5 V, I _C = 0	—	—	-100	nA	
DC Current Gain	h _{FE}	V _{CE} = -5 V, I _C = -1 mA	120	—	400		
Collector-Emitter Saturation Voltage	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	 <p>The diagram shows a rectangular component with a small square protrusion at the top center and two small square protrusions at the bottom corners. Inside the rectangle, the letters 'Y K' are printed. A line with an arrow points from the text 'Type Name' to the 'Y' character.</p>
RN2111F	 <p>The diagram shows a rectangular component with a small square protrusion at the top center and two small square protrusions at the bottom corners. Inside the rectangle, the letters 'Y M' are printed. A line with an arrow points from the text 'Type Name' to the 'Y' character.</p>