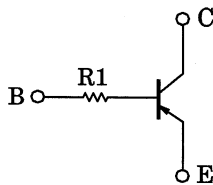


## RN2110FV, RN2111FV

Switching, Inverter Circuit, Interface Circuit and Driver Circuit Applications

- Built-in bias resistors
- Simplified circuit design
- Reduced quantity of parts and manufacturing process
- Complementary to RN1110FV, RN1111FV

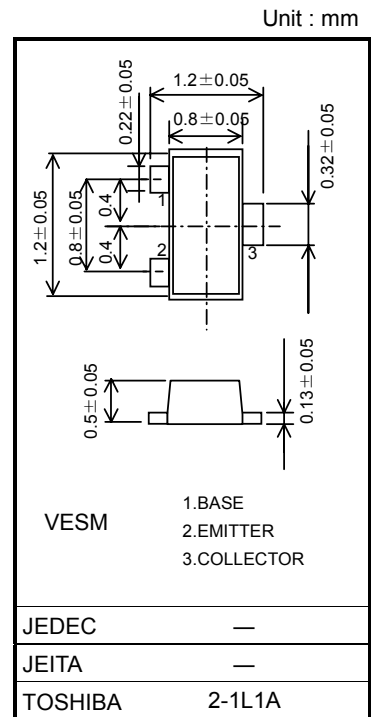
### Equivalent Circuit



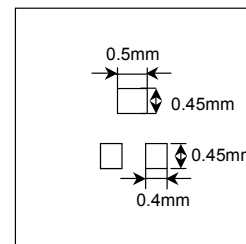
### Maximum Ratings (Ta = 25°C)

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	$P_C$ (Note)	150	mW
Junction temperature	$T_j$	150	°C
Storage temperature range	$T_{stg}$	-55~150	°C

Note : Mounted on FR4 board (25.4 mm × 25.4 mm × 1.6mm)

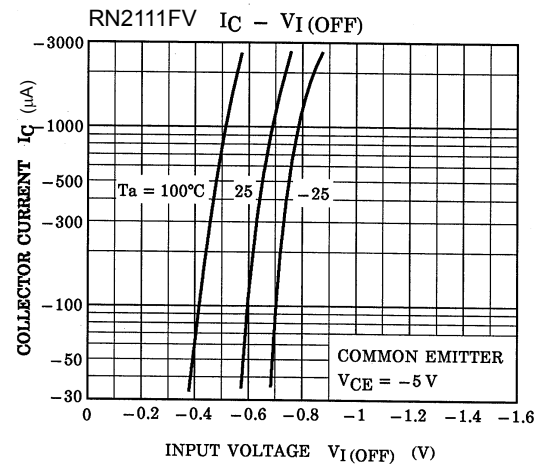
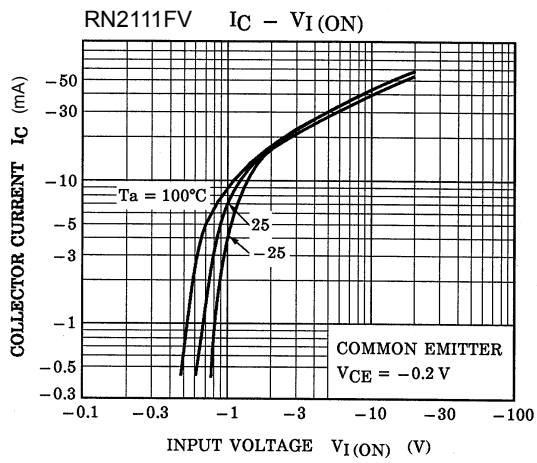
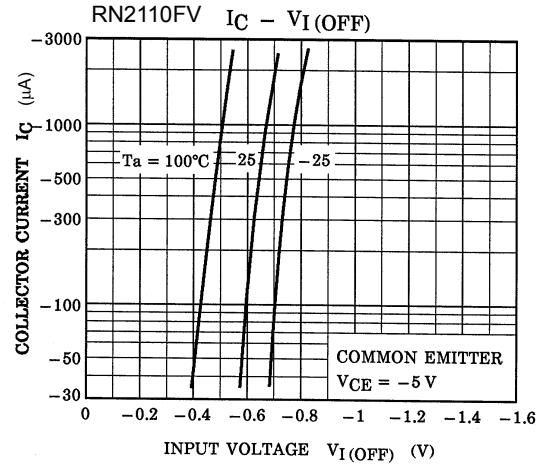
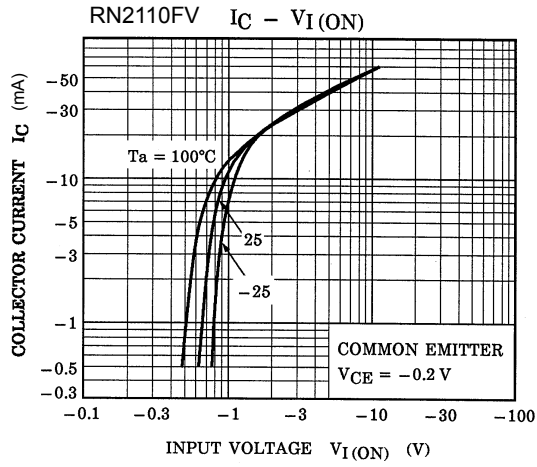


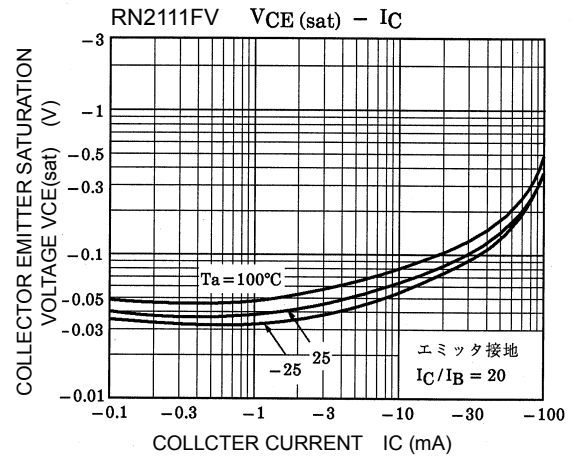
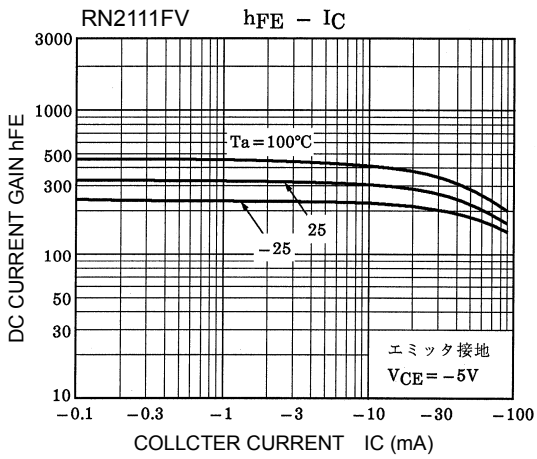
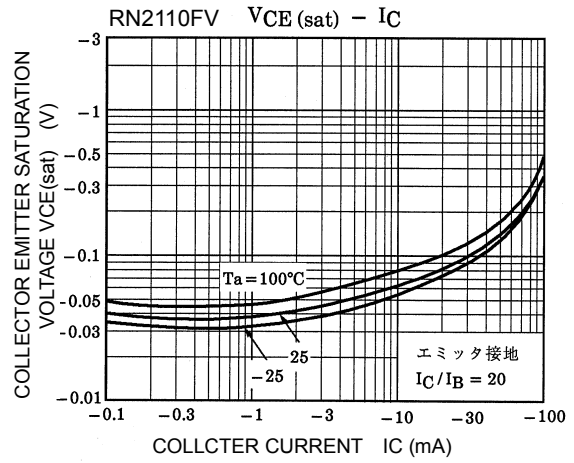
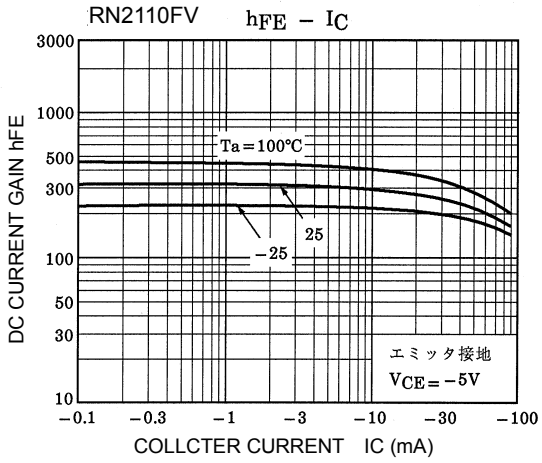
Weight: 0.0015g (typ.)

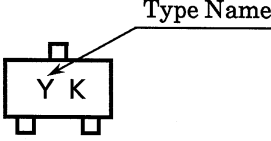
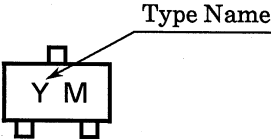


### Electrical Characteristics (Ta = 25°C)

Characteristic	Symbol	Test Circuit	Test Condition	Min	Typ.	Max	Unit
Collector cut-off current	$I_{CB0}$	—	$V_{CB} = -50V, I_E = 0$	—	—	-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	—	400	
Collector-emitter saturation voltage	$V_{CE(sat)}$	—	$I_C = -5mA, I_B = -0.25mA$	—	-0.1	-0.3	V
Transition frequency	$f_T$	—	$V_{CE} = -10V, I_C = -5mA$	—	200	—	MHz
Collector output capacitance	$C_{ob}$	—	$V_{CB} = -10V, I_E = 0, f = 1MHz$	—	3	—	pF
Input resistor	RN2110FV	R1	—	3.29	4.7	6.11	kΩ
	RN2111FV			7	10	13	





Type Name	Marking
RN2110FV	 <p>The diagram shows a rectangular component with a small square protrusion on top and two small rectangular feet on the bottom. Inside the rectangle, the letters 'Y' and 'K' are printed. An arrow points from the text 'Type Name' to the 'Y' character.</p>
RN2111FV	 <p>The diagram shows a rectangular component with a small square protrusion on top and two small rectangular feet on the bottom. Inside the rectangle, the letters 'Y' and 'M' are printed. An arrow points from the text 'Type Name' to the 'Y' character.</p>

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