

TOSHIBA TRANSISTOR SILICON NPN EPITAXIAL TYPE (PCT PROCESS)

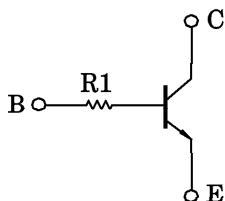
RN1410, RN1411

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

Unit in mm

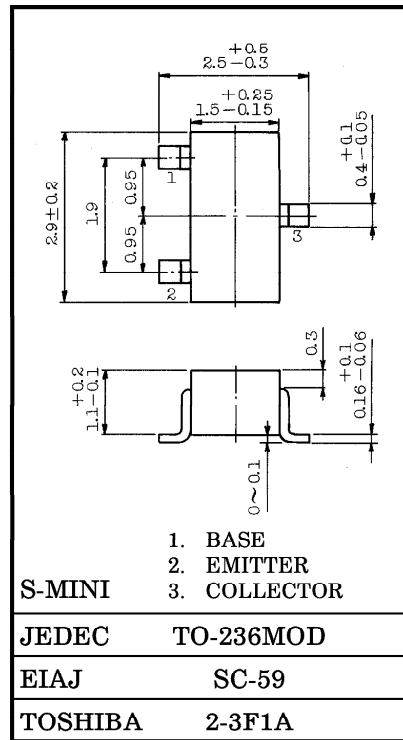
- With Built-in Bias Resistors
- Simplify Circuit Design
- Reduce a Quantity of Parts and Manufacturing Process
- Complementary to RN2410, RN2411

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	200	mW
Junction Temperature	T _j	150	°C
Storage Temperature Range	T _{stg}	-55~150	°C



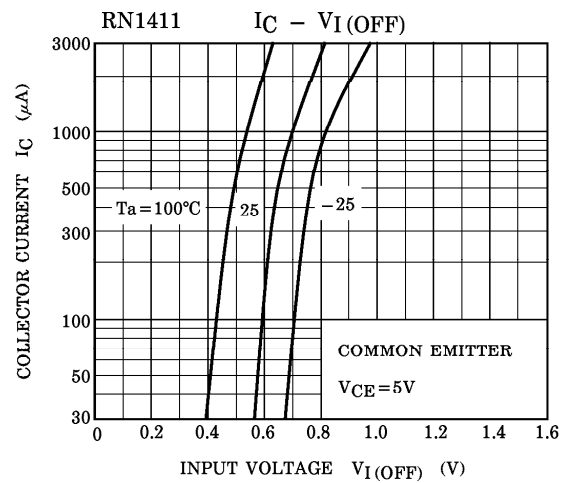
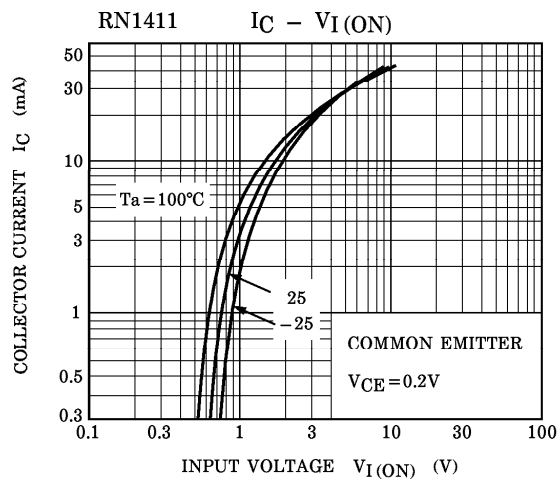
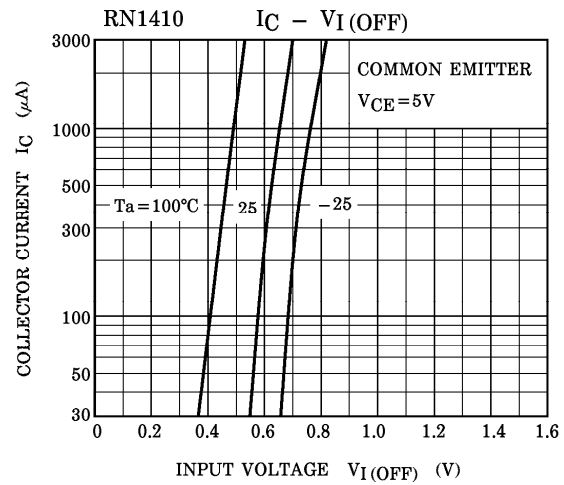
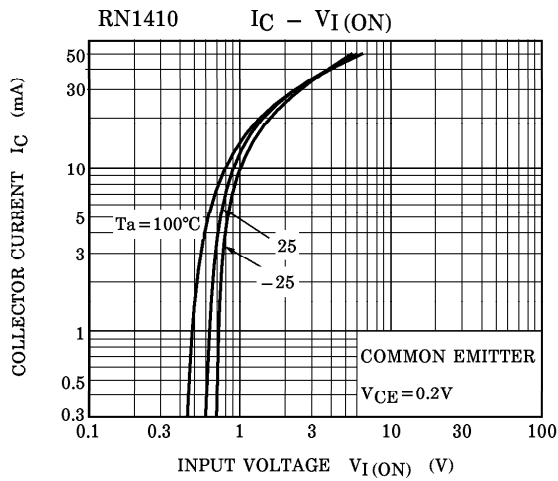
Weight : 0.012g

ELECTRICAL CHARACTERISTICS (Ta = 25°C)

CHARACTERISTIC	SYMBOL	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	—	700		
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	—	250	—	MHz	
Collector Output Capacitance	C _{ob}	V _{CB} = 10V, I _E = 0V, f = 1MHz	—	3	6	pF	
Input Resistor	RN1410	R1	—	3.29	4.7	6.11	kΩ
	RN1411			7	10	13	

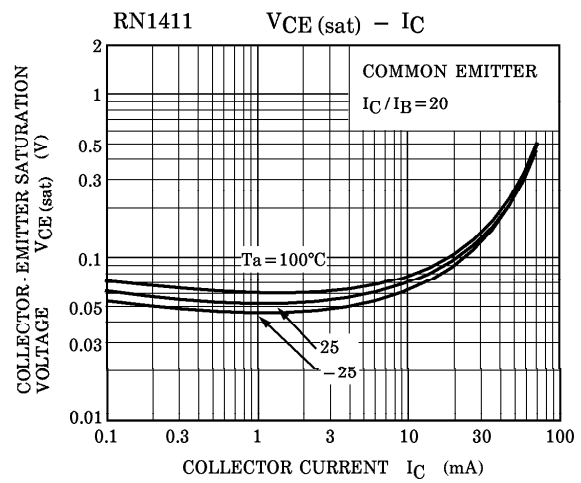
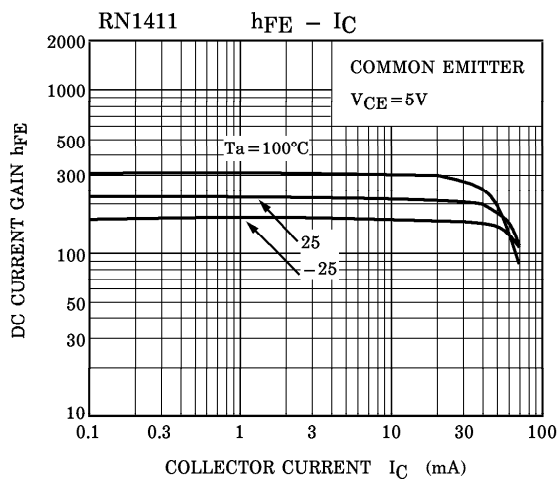
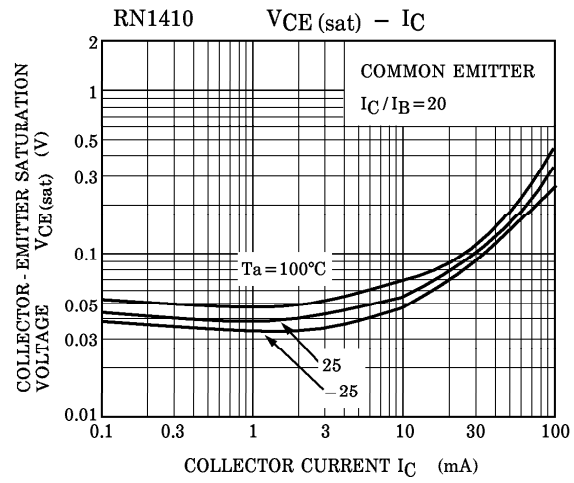
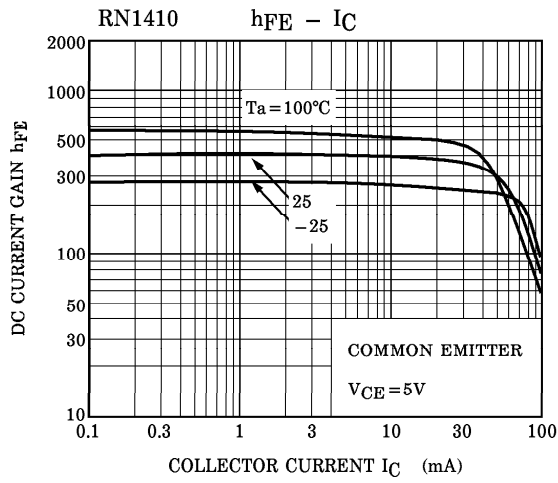
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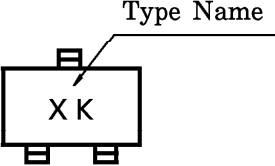
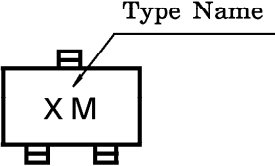
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TYPE NAME	MARKING
RN1410	 A diagram of a rectangular component with four pins. The top-left pin is labeled 'Type Name' with a line pointing to it. The component is marked with 'X K' in the center.
RN1411	 A diagram of a rectangular component with four pins. The top-left pin is labeled 'Type Name' with a line pointing to it. The component is marked with 'X M' in the center.