

TOSHIBA TRANSISTOR SILICON PNP EPITAXIAL TYPE (PCT PROCESS)

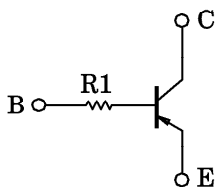
RN2112, RN2113

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

Unit in mm

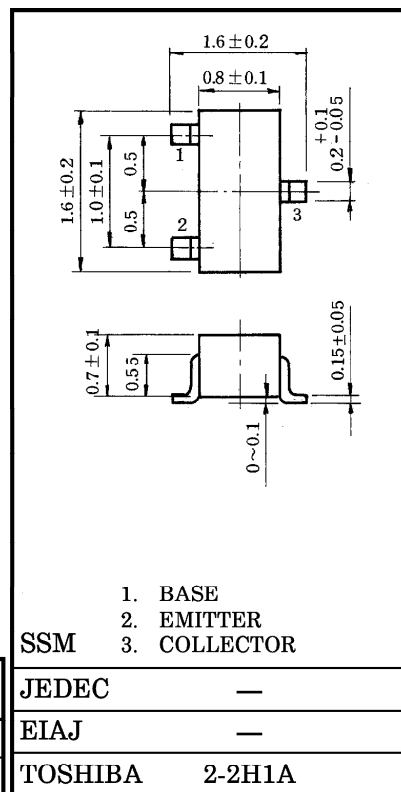
- With Built-in Bias Resistors
- Simplify Circuit Design
- Reduce a Quantity of Parts and Manufacturing Process
- Complementary to RN1112, RN1113

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



SSM

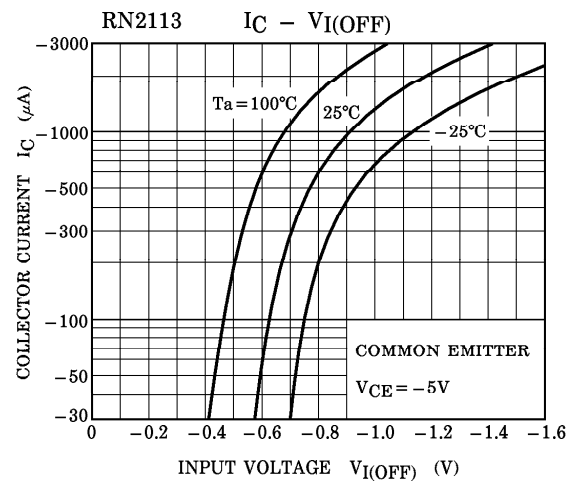
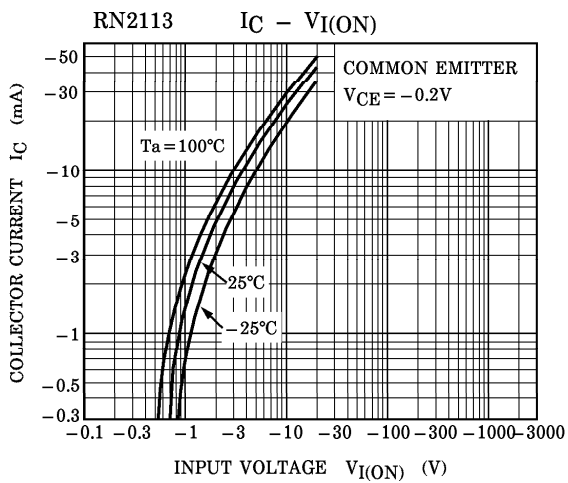
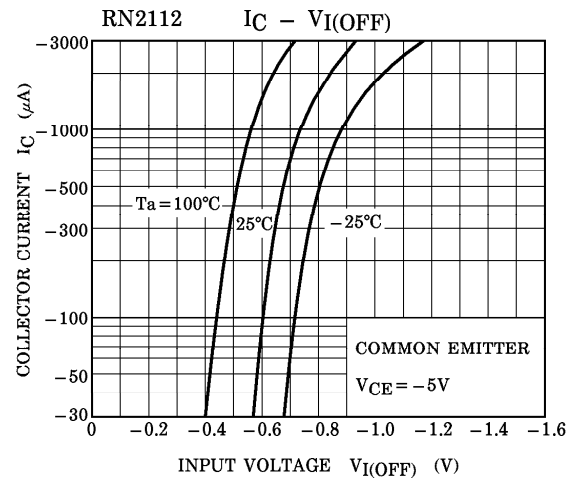
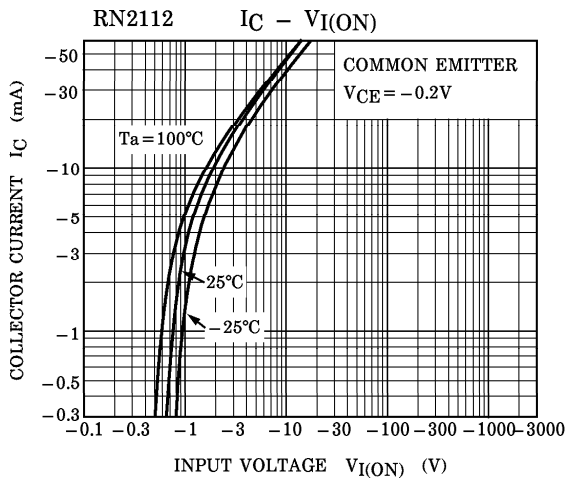
Weight : 2.4mg

ELECTRICAL CHARACTERISTICS (Ta = 25°C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT	
Collector Cut-off Current	I _{CBO}	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	6	pF	
Input Resistance	RN2112	R1	—	15.4	22	28.6	kΩ
	RN2113			32.9	47	61.1	

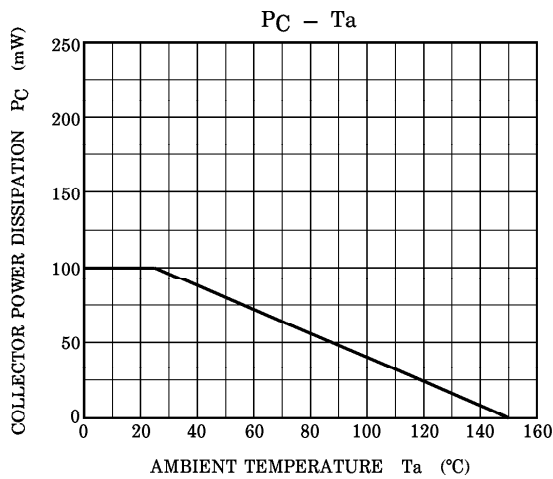
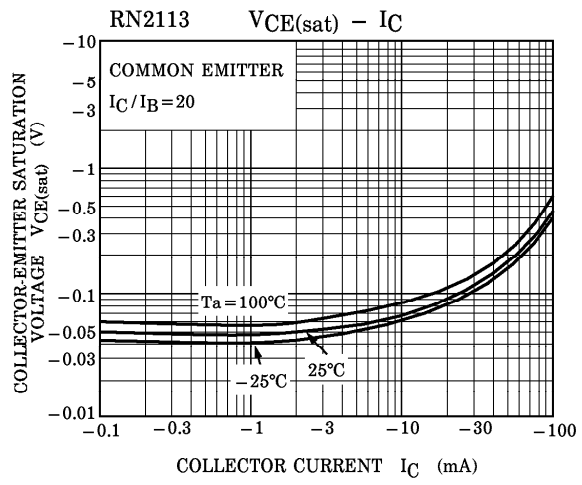
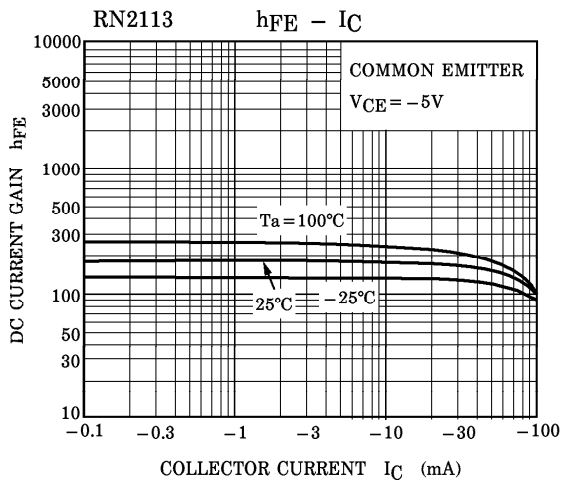
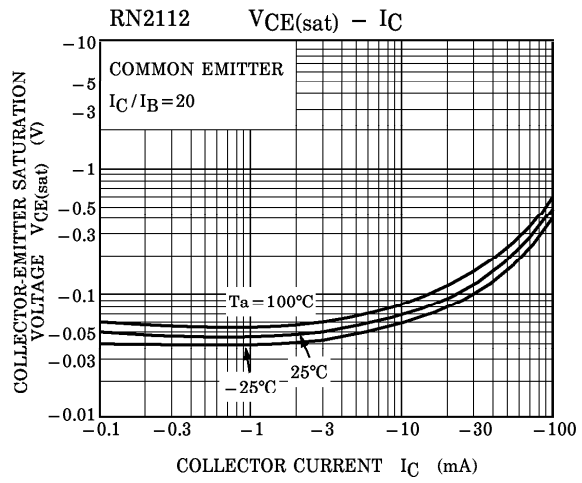
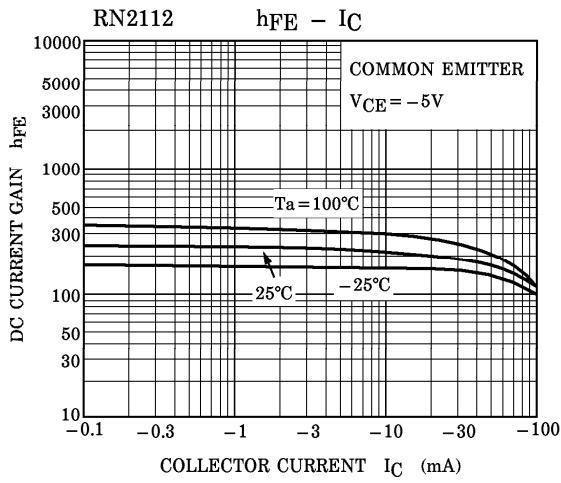
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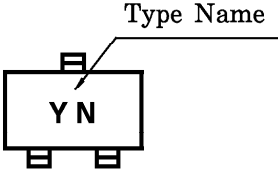
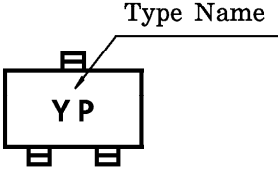
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TYPE NAME	MARKING
RN2112	 A schematic diagram of a component marking. It shows a rectangular box with the letters "Y N" inside. Above the box is a small square with a diagonal line. Below the box are two more small squares, one on each side. A line points from the text "Type Name" to the top square.
RN2113	 A schematic diagram of a component marking. It shows a rectangular box with the letters "Y P" inside. Above the box is a small square with a diagonal line. Below the box are two more small squares, one on each side. A line points from the text "Type Name" to the top square.