

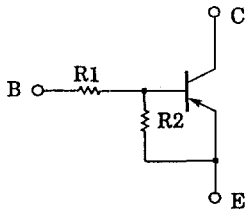
RN2101, 2102, 2103 RN2104, 2105, 2106

(RN2101)

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

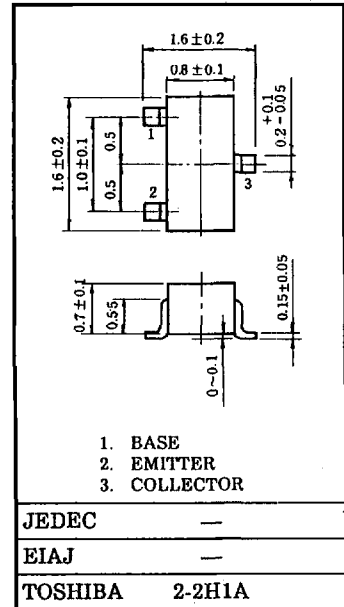
- With Built-in Bias Resistors
- Simplify Circuit Design
- Reduce a Quantity of Parts and Manufacturing Process
- Complementary to RN1101~RN1106

EQUIVALENT CIRCUIT AND BIAS RESISTOR VALUES



TYPE No.	R1(k Ω)	R2(k Ω)
RN2101	4.7	4.7
RN2102	10	10
RN2103	22	22
RN2104	47	47
RN2105	2.2	47
RN2106	4.7	47

Unit in mm



Weight : 2.4mg

MAXIMUM RATINGS (Ta = 25°C)

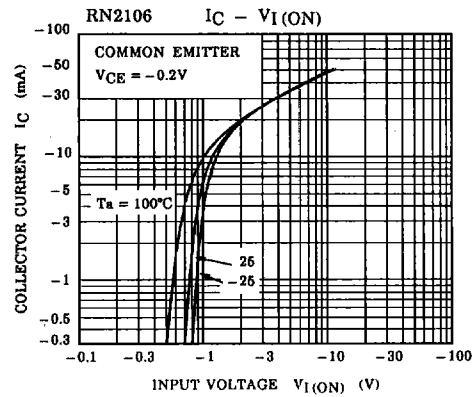
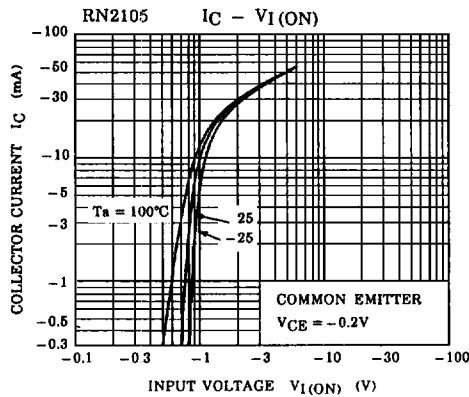
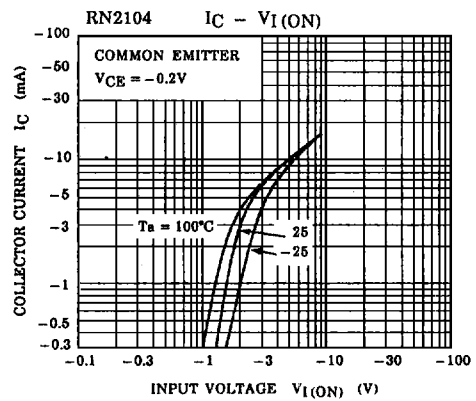
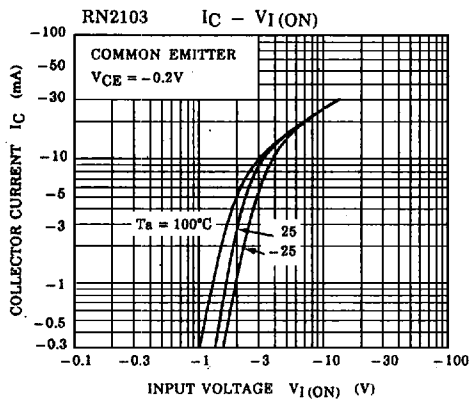
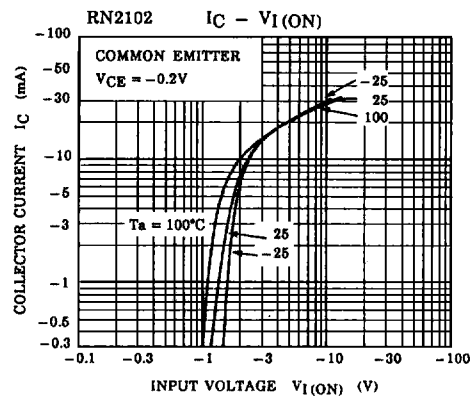
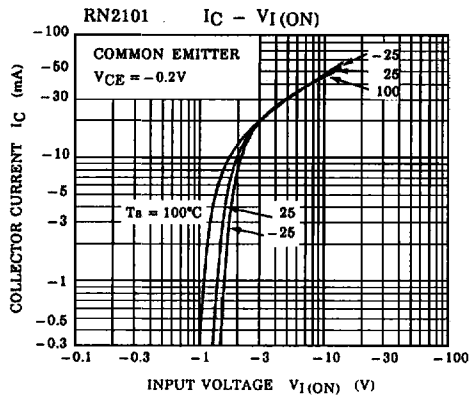
CHARACTERISTIC		SYMBOL	RATING	UNIT
Collector-Base Voltage	RN2101~2106	VCBO	-50	V
Collector-Emitter Voltage		VCEO	-50	V
Emitter-Base Voltage	RN2101~2104	VEBO	-10	V
	RN2105, 2106		-5	
Collector Current	RN2101~2106	IC	-100	mA
Collector Power Dissipation		PC	100	mW
Junction Temperature		Tj	150	°C
Storage Temperature Range		Tstg	-55~150	°C

RN2101, 2102, 2103 RN2104, 2105, 2106

(RN2101)
ELECTRICAL CHARACTERISTICS (Ta = 25°C)

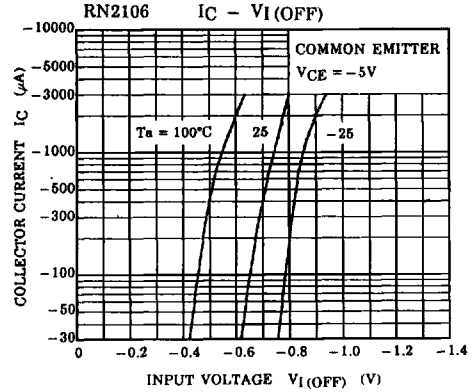
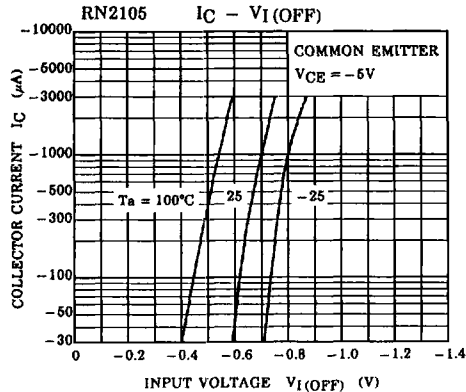
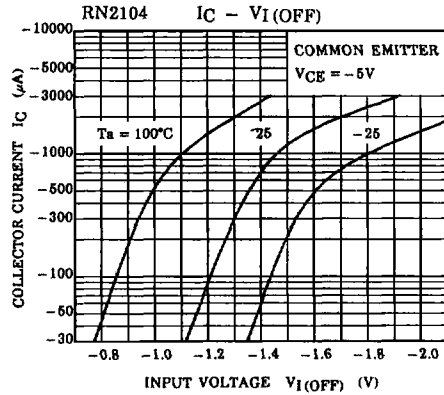
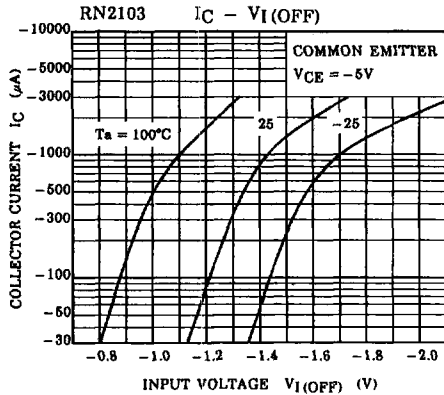
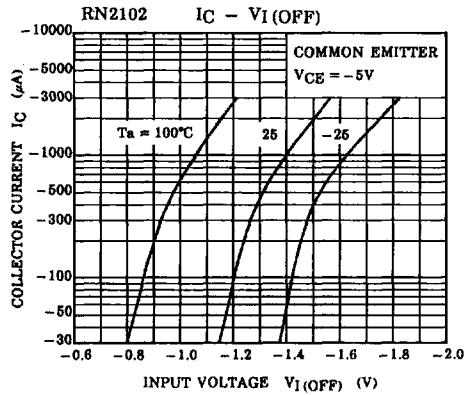
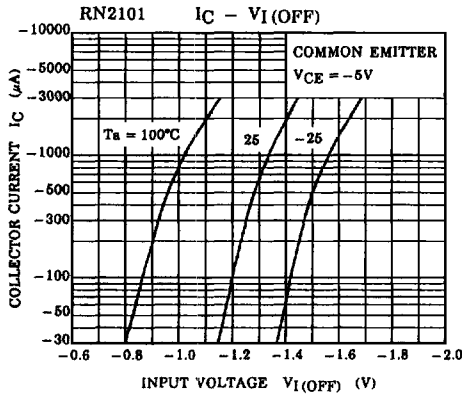
CHARACTERISTIC		SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	RN2101~2106	ICBO	V _{CB} = -50V, I _E = 0	—	—	-100	nA
		ICEO	V _{CE} = -50V, I _B = 0	—	—	-500	
Emitter Cut-off Current	RN2101	IEBO	V _{EB} = -10V, I _C = 0	-0.82	—	-1.52	mA
	RN2102			-0.38	—	-0.71	
	RN2103			-0.17	—	-0.33	
	RN2104		-0.082	—	-0.15		
	RN2105		V _{EB} = -5V, I _C = 0	-0.078	—	-0.145	
	RN2106			-0.074	—	-0.138	
DC Current Gain	RN2101	h _{FE}	V _{CE} = -5V I _C = -10mA	30	—	—	
	RN2102			50	—	—	
	RN2103			70	—	—	
	RN2104			80	—	—	
	RN2105			80	—	—	
	RN2106			80	—	—	
Collector-Emitter Saturation Voltage	RN2101~2106	V _{CE(sat)}	I _C = -5mA I _B = -0.25mA	—	-0.1	-0.3	V
Input Voltage(ON)	RN2101	V _{I(ON)}	V _{CE} = -0.2V I _C = -5mA	-1.1	—	-2.0	V
	RN2102			-1.2	—	-2.4	
	RN2103			-1.3	—	-3.0	
	RN2104			-1.5	—	-5.0	
	RN2105			-0.6	—	-1.1	
	RN2106			-0.7	—	-1.3	
Input Voltage(OFF)	RN2101~2104 RN2105, 2106	V _{I(OFF)}	V _{CE} = -5V I _C = -0.1mA	-1.0	—	-1.5	V
Transition Frequency	RN2101~2106	f _T	V _{CE} = -10V, I _C = -5mA	—	200	—	MHz
Collector Output Capacitance	RN2101~2106	C _{ob}	V _{CB} = -10V, I _E = 0 f = 1MHz	—	3	6	pF
Input Resistor	RN2101	R ₁		3.29	4.7	6.11	kΩ
	RN2102			7	10	13	
	RN2103			15.4	22	28.6	
	RN2104			32.9	47	61.1	
	RN2105			1.54	2.2	2.86	
	RN2106			3.29	4.7	6.11	
Resistor Ratio	RN2101~2104	R ₁ /R ₂		0.9	1.0	1.1	
	RN2105			0.0421	0.0468	0.0515	
	RN2106			0.09	0.1	0.11	

(RN2101)



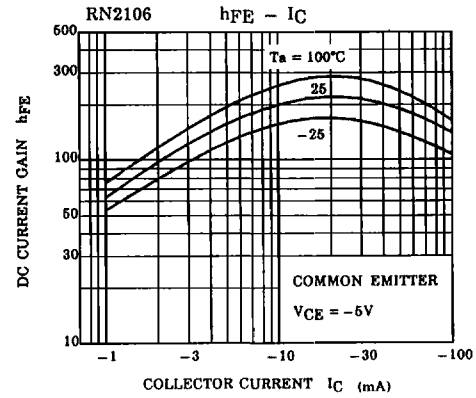
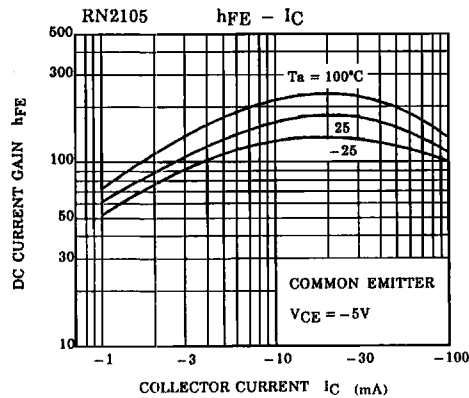
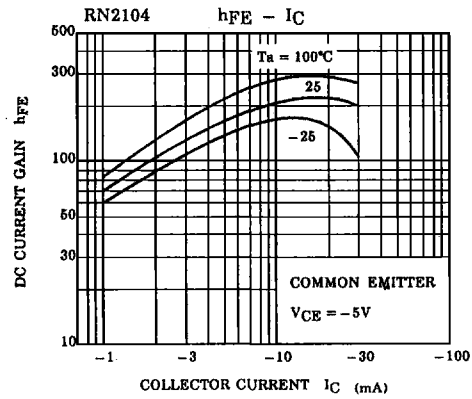
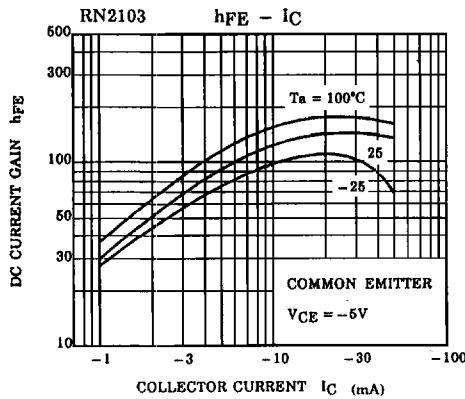
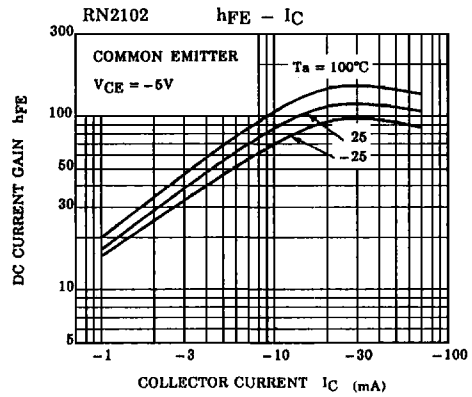
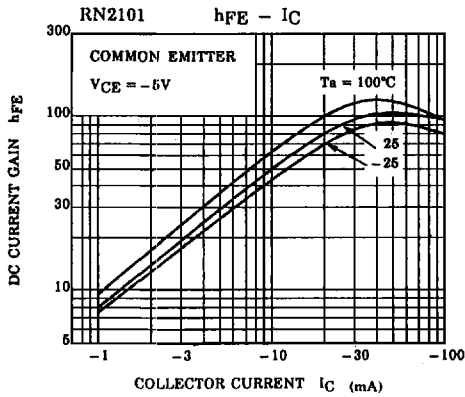
RN2101, 2102, 2103 RN2104, 2105, 2106

(RN2101)



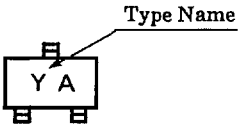
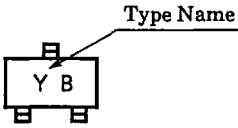
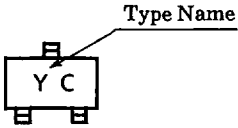
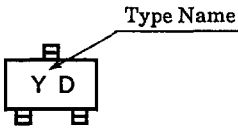
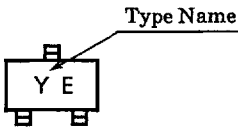
**RN2101, 2102, 2103
RN2104, 2105, 2106**

(RN2101)



**RN2101, 2102, 2103
RN2104, 2105, 2106**

(RN2101)

TYPE NAME	MARKING
RN2101	
RN2102	
RN2103	
RN2104	
RN2105	
RN2106	