

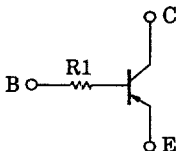
RN2312, 2313

(RN2312)

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 RN1312, RN1313

EQUIVALENT CIRCUIT



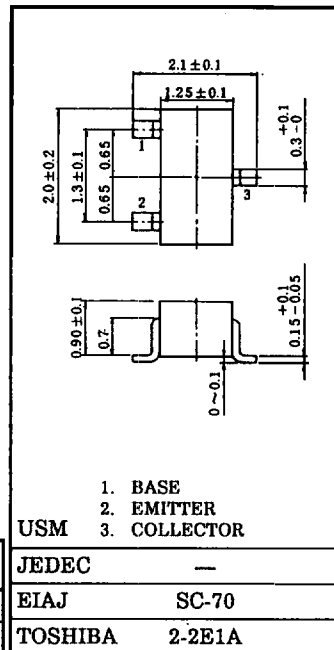
MAXIMUM RATINGS (Ta = 25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	V _{CB0}	-50	V
Collector-Emitter Voltage	V _{CE0}	-50	V
Emitter-Base Voltage	V _{EB0}	-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 _{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	RN2312	R1	—	15.4	22	28.6	kΩ
	RN2313			32.9	47	61.1	

Unit in mm

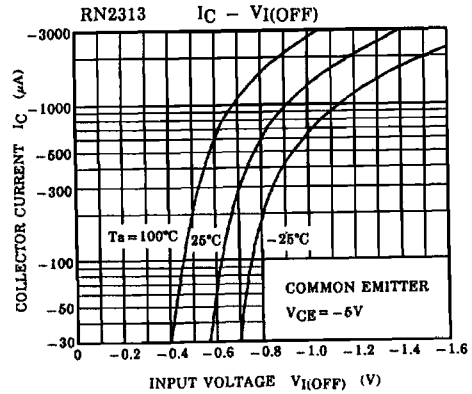
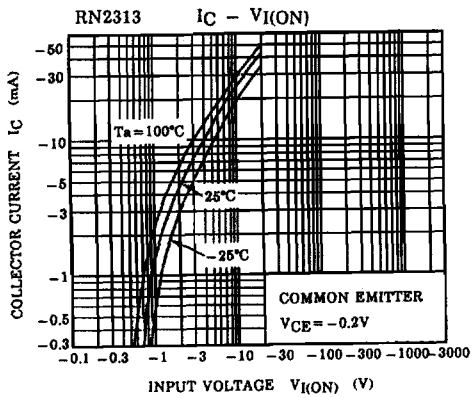
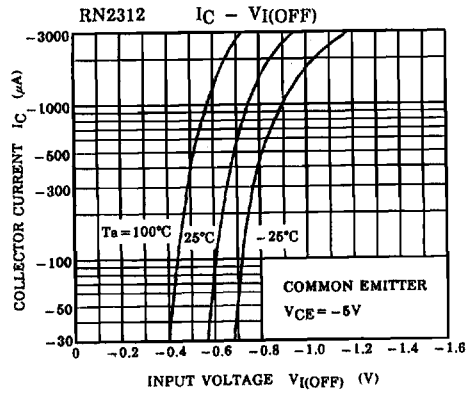
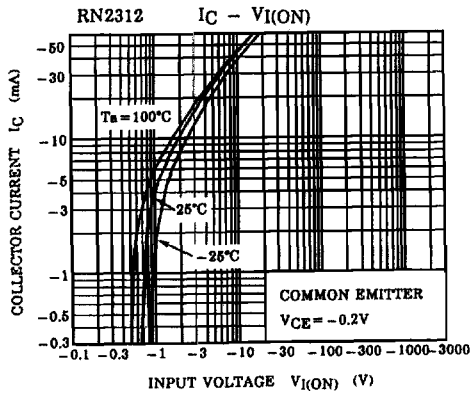


1. BASE
2. EMITTER
3. COLLECTOR

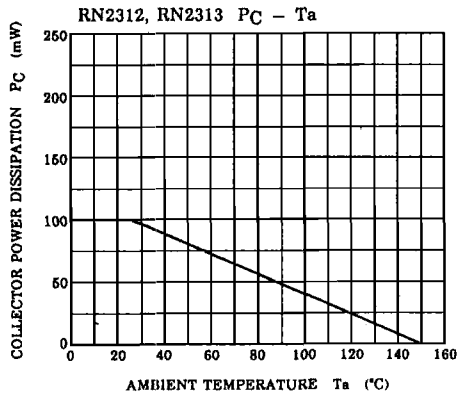
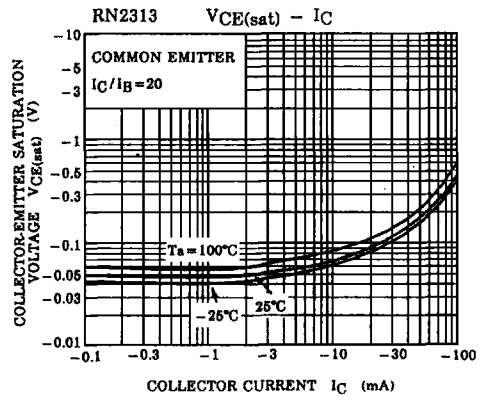
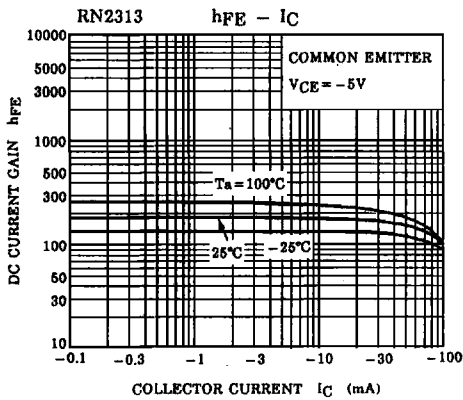
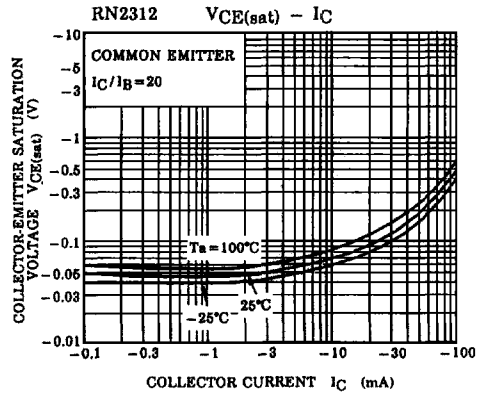
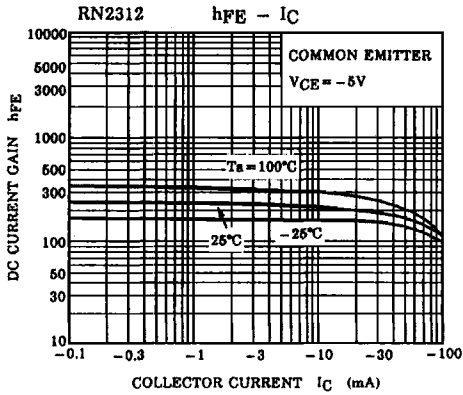
JEDEC —
EIAJ SC-70
TOSHIBA 2-2E1A

Weight : 0.006g

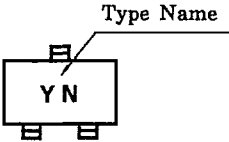
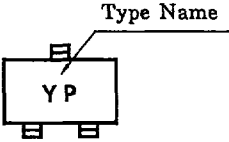
(RN2312)



(RN2312)



(RN2312)

TYPE NAME	MARKING
RN2312	 <p>The diagram shows a rectangular box with the letters 'Y N' inside. A line labeled 'Type Name' points to a small square symbol on the top edge of the box. Below the box are two small square symbols.</p>
RN2313	 <p>The diagram shows a rectangular box with the letters 'Y P' inside. A line labeled 'Type Name' points to a small square symbol on the top edge of the box. Below the box are two small square symbols.</p>