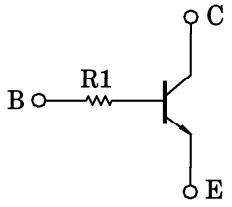
TOSHIBA TRANSISTOR SILICON NPN EPITAXIAL TYPE (PCT PROCESS)

RN1910, RN1911

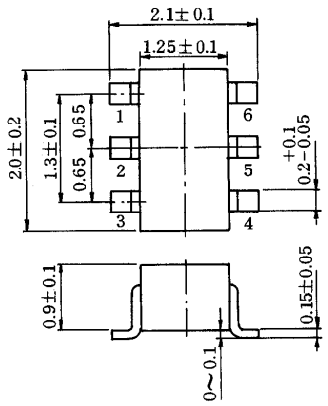
SWITCHING, INVERTER CIRCUIT, INTERFACE CIRCUIT
AND DRIVER CIRCUIT APPLICATIONS.

- Including Two Devices In US6 (Ultra Super Mini Type 6 leads)
- With built-in Bias Resistors
- Simplify Circuit Design
- Reduce a Quantity of Parts and Manufacturing Process
- Complementary to RN2910, RN2911

EQUIVALENT CIRCUIT



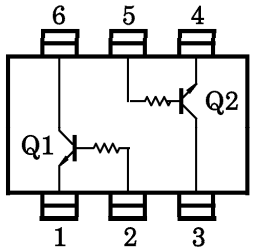
Unit in mm



	1. EMITTER 1	(E1)
	2. BASE 1	(B1)
	3. COLLECTOR 2	(C2)
	4. EMITTER 2	(E2)
	5. BASE 2	(B2)
US6	6. COLLECTOR 1	(C1)
JEDEC	—	
EIAJ	—	
TOSHIBA	2-2J1A	

Weight : 6.8mg

EQUIVALENT CIRCUIT (TOP VIEW)



MAXIMUM RATINGS (Ta = 25°C) (Q1, Q2 COMMON)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	V_{CBO}	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	J_j	150	°C
Storage Temperature Range	T_{stg}	−55~150	°C

* : Total Rating

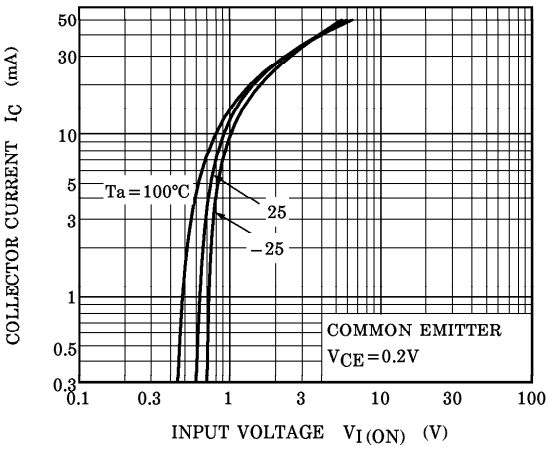
ELECTRICAL CHARACTERISTICS (Ta = 25°C) (Q1, Q2 COMMON)

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	—	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	RN1910	R1	—	3.29	4.7	6.11	kΩ
	RN1910			7	10	13	

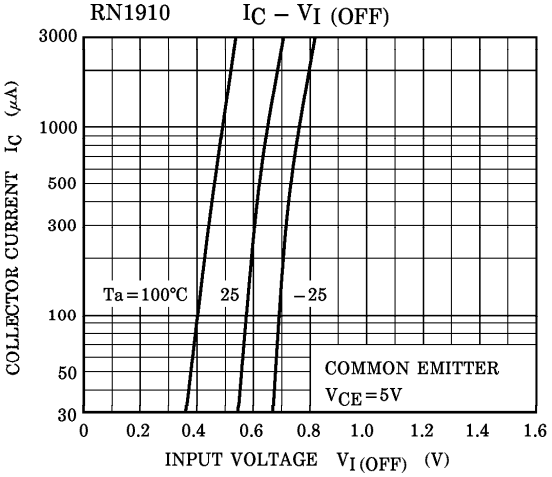
961001EAA2

(Q1, Q2 COMMON)

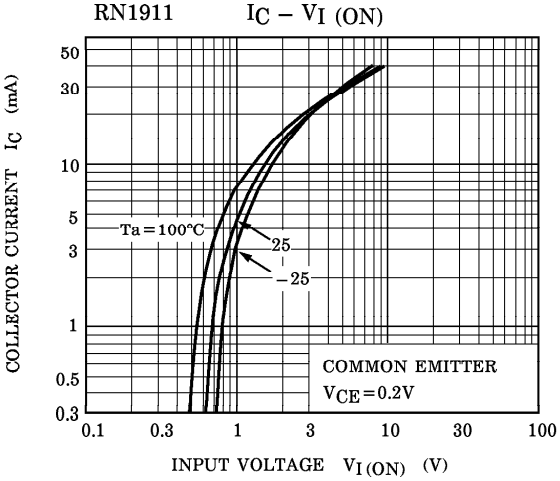
RN1910 $I_C - V_I$ (ON)



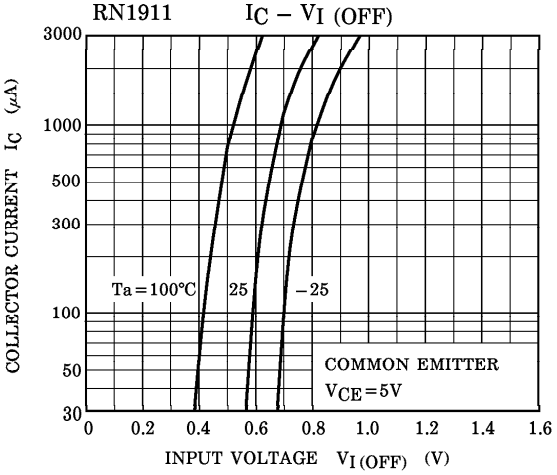
RN1910 $I_C - V_I$ (OFF)



RN1911 $I_C - V_I$ (ON)

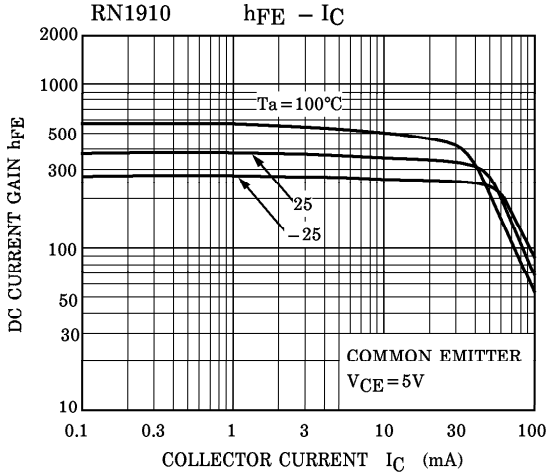


RN1911 $I_C - V_I$ (OFF)

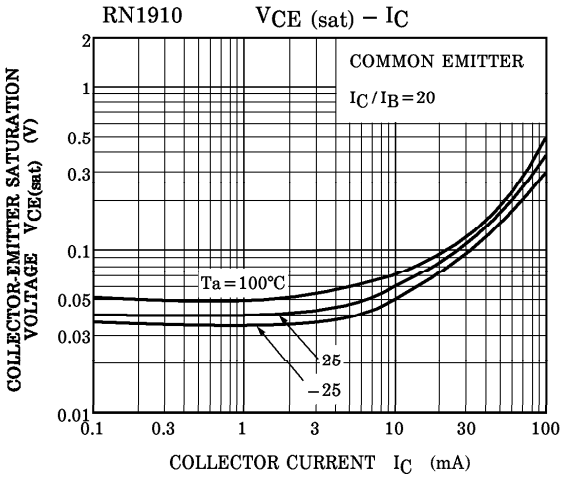


(Q1, Q2 COMMON)

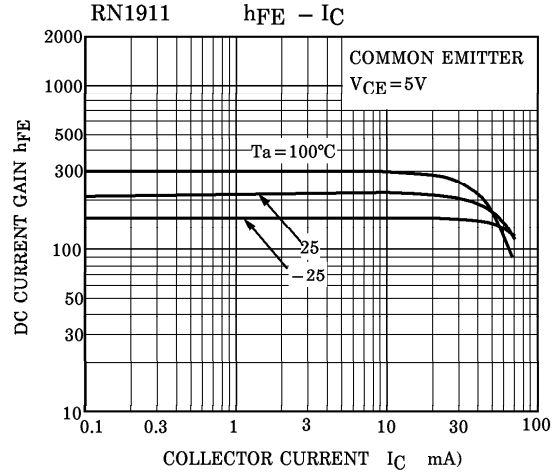
RN1910 h_{FE} – I_C



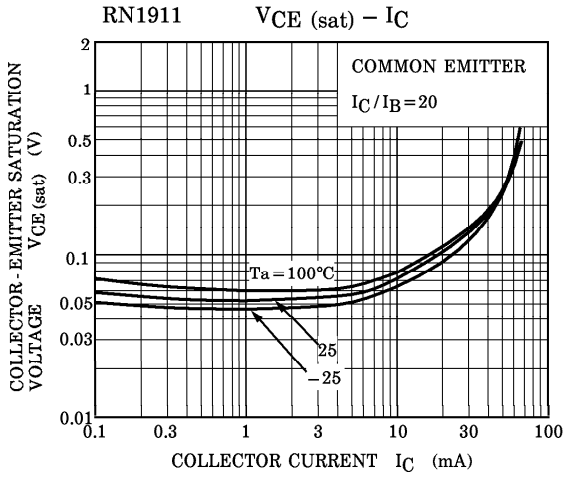
RN1910 $V_{CE\ (sat)}$ – I_C

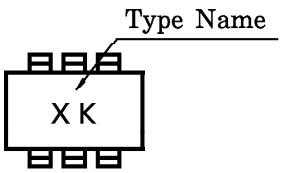


RN1911 h_{FE} – I_C



RN1911 $V_{CE\ (sat)}$ – I_C



TYPE NAME	MARKING
RN1910	
RN1911