

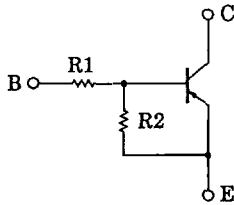
RN2501, 2502, 2503 RN2504, 2505, 2506

(RN2501)

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

- Including Two Devices in SMV (Super Mini Type with 5 leads)
- With Built-in Bias Resistors
- Simplify Circuit Design
- Reduce a Quantity of Parts and Manufacturing Process
- Complementary to RN1501~RN1506

EQUIVALENT CIRCUIT AND BIAS RESISTOR VALUES



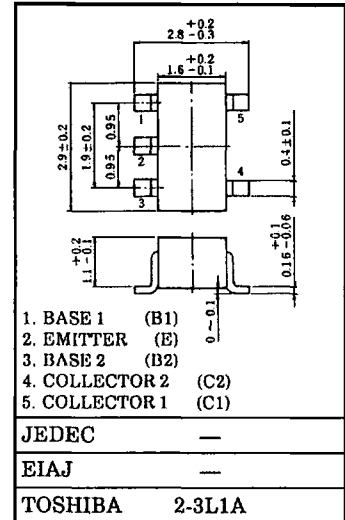
TYPE No.	R1 (kΩ)	R2 (kΩ)
RN2501	4.7	4.7
RN2502	10	10
RN2503	22	22
RN2504	47	47
RN2505	2.2	47
RN2506	4.7	47

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

CHARACTERISTIC		SYMBOL	RATING	UNIT
Collector-Base Voltage	RN2501~2506	V _{CBO}	-50	V
Collector-Emitter Voltage		V _{CEO}	-50	V
Emitter-Base Voltage	RN2501~2504	V _{EBO}	-10	V
	RN2505, 2506		-5	
Collector Current	RN2501~2506	I _C	-100	mA
Collector Power Dissipation		P _C *	300	mW
Junction Temperature		T _j	150	°C
Storage Temperature Range		T _{stg}	-55~150	°C

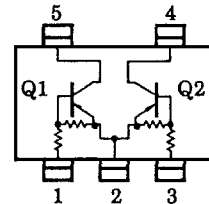
* : Total Rating

Unit in mm



Weight : 0.014g

EQUIVALENT CIRCUIT (TOP VIEW)



RN2501, 2502, 2503
RN2504, 2505, 2506

(RN2501)

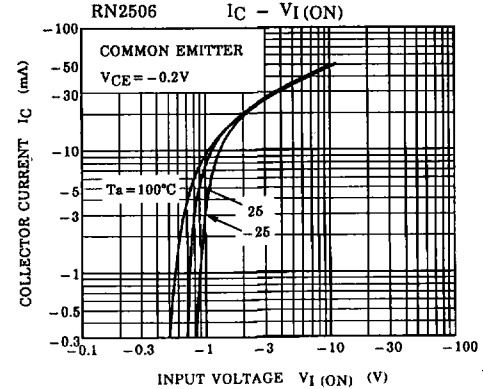
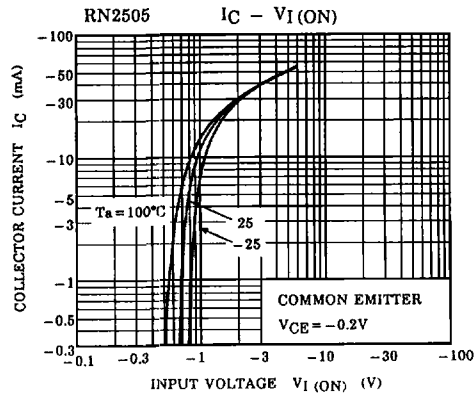
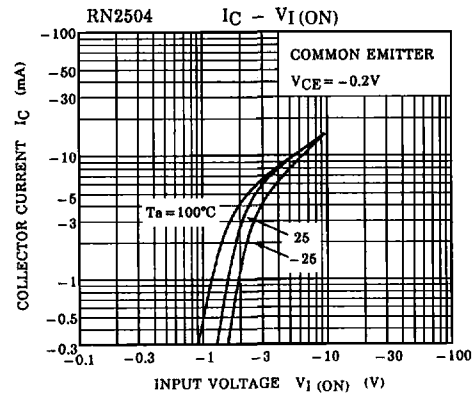
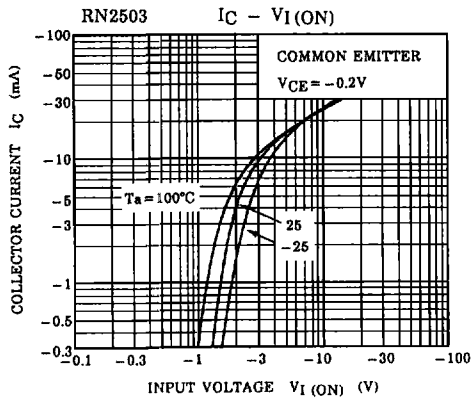
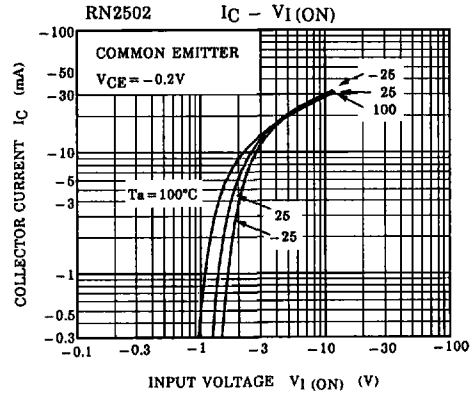
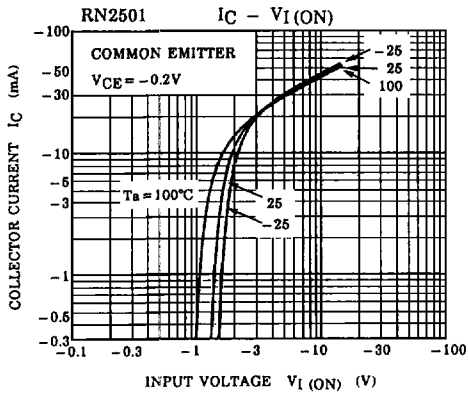
ELECTRICAL CHARACTERISTICS (Ta = 25°C) (Q1, Q2 COMMON)

CHARACTERISTIC		SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	RN2501~2506	ICBO	V _{CB} = -50V, I _B = 0	—	—	-100	nA
		ICEO	V _{CE} = -50V, I _B = 0	—	—	-500	
Emitter Cut-off Current	RN2501	I _{EBO}	V _{EB} = -10V, I _C = 0	-0.82	—	-1.52	mA
	RN2502			-0.38	—	-0.71	
	RN2503			-0.17	—	-0.33	
	RN2504		-0.082	—	-0.15		
	RN2505		V _{EB} = -5V, I _C = 0	-0.078	—	-0.145	
	RN2506			-0.074	—	-0.138	
DC Current Gain	RN2501	h _{FE}	V _{CE} = -5V, I _C = -10mA	30	—	—	
	RN2502			50	—	—	
	RN2503			70	—	—	
	RN2504			80	—	—	
	RN2505			80	—	—	
	RN2506			80	—	—	
Collector-Emitter Saturation Voltage	RN2501~2506	V _{CE(sat)}	I _C = -5mA I _B = -0.25mA	—	-0.1	-0.3	V
Input Voltage (ON)	RN2501	V _{I(ON)}	V _{CE} = -0.2V I _C = -5mA	-1.1	—	-2.0	V
	RN2502			-1.2	—	-2.4	
	RN2503			-1.3	—	-3.0	
	RN2504			-1.5	—	-5.0	
	RN2505			-0.6	—	-1.1	
	RN2506			-0.7	—	-1.3	
Input Voltage (OFF)	RN2501~2504	V _{I(OFF)}	V _{CE} = -5V I _C = -0.1mA	-1.0	—	-1.5	V
	RN2505, 2506			-0.5	—	-0.8	
Transition Frequency	RN2501~2506	f _T	V _{CE} = -10V, I _C = -5mA	—	200	—	MHz
Collector Output Capacitance	RN2501~2506	C _{ob}	V _{CB} = -10V, I _E = 0, f = 1MHz	—	3	6	pF
Input Resistor	RN2501	R _I		3.29	4.7	6.11	kΩ
	RN2502			7	10	13	
	RN2503			15.4	22	28.6	
	RN2504			32.9	47	61.1	
	RN2505			1.54	2.2	2.86	
	RN2506			3.29	4.7	6.11	
Resistor Ratio	RN2501~2504	R ₁ / R ₂		0.9	1.0	1.1	
	RN2505			0.0421	0.0468	0.0515	
	RN2506			0.09	0.1	0.11	

RN2501, 2502, 2503 RN2504, 2505, 2506

(RN2501)

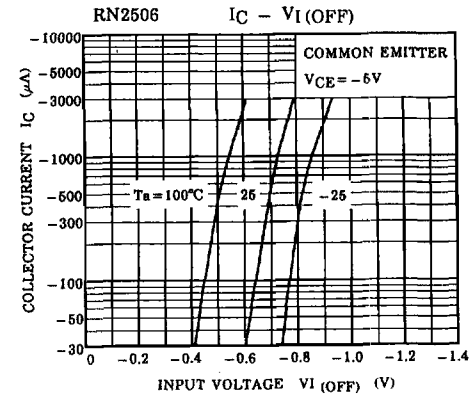
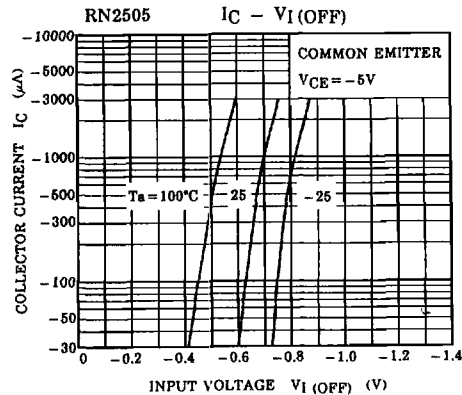
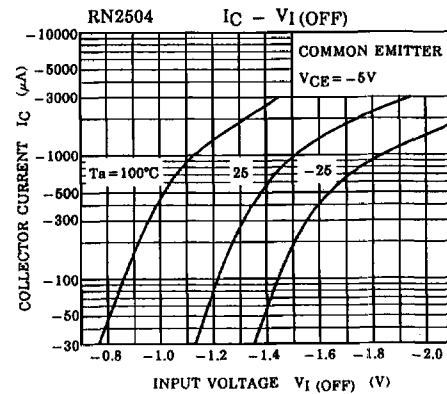
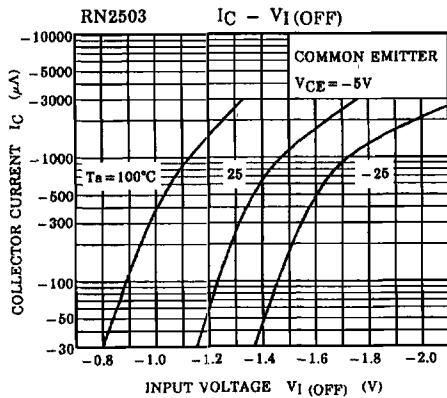
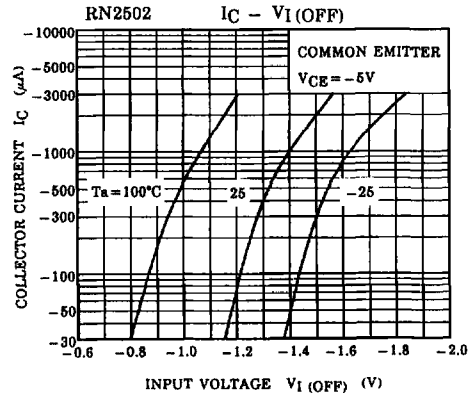
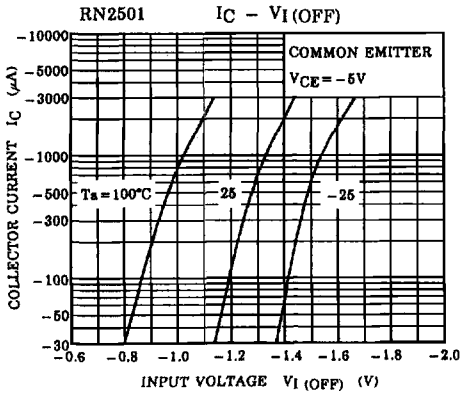
(Q1, Q2 COMMON)



RN2501, 2502, 2503 RN2504, 2505, 2506

(RN2501)

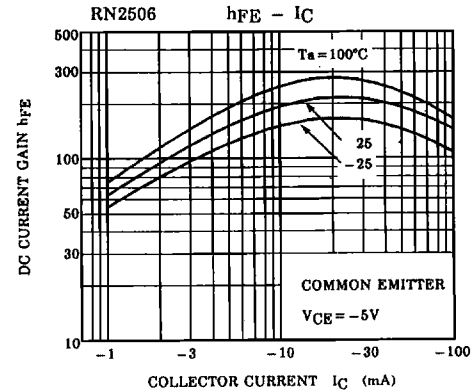
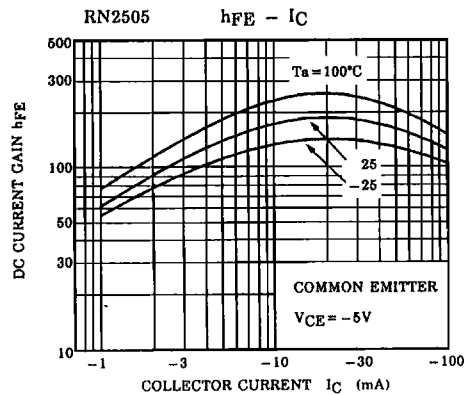
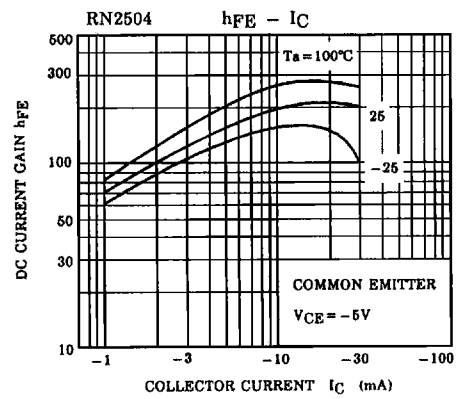
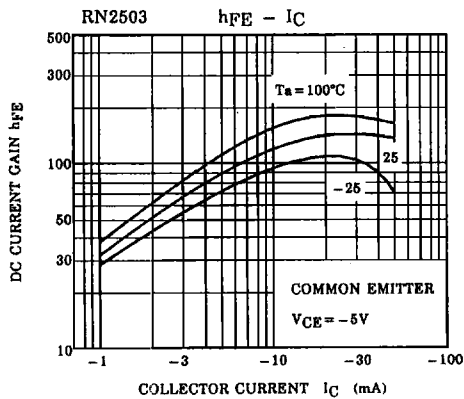
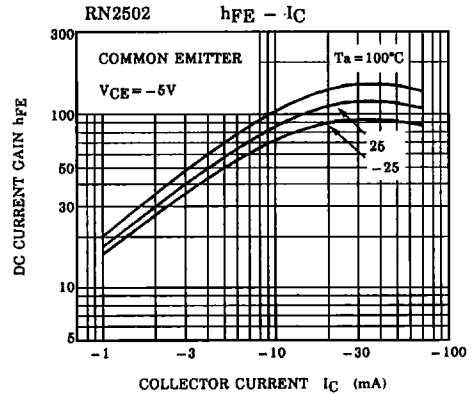
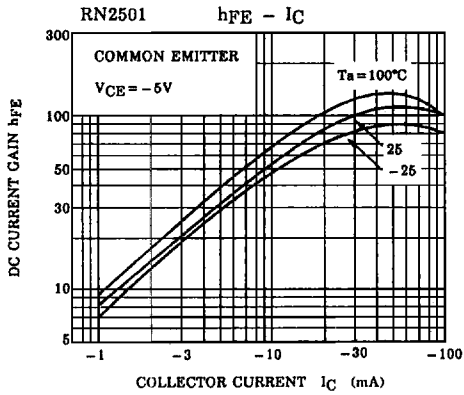
(Q1, Q2 COMMON)



RN2501, 2502, 2503 RN2504, 2505, 2506

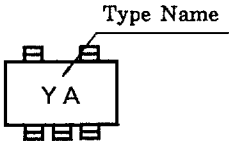
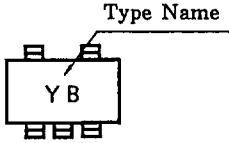
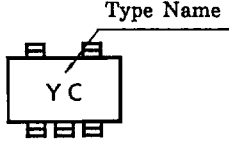
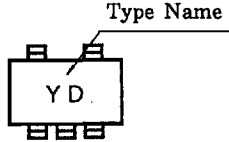
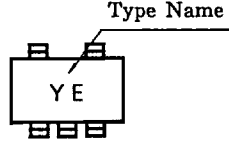
(RN2501)

(Q1, Q2 COMMON)



**RN2501, 2502, 2503
RN2504, 2505, 2506**

(RN2501)

TYPE NAME	MARKING
RN2501	
RN2502	
RN2503	
RN2504	
RN2505	
RN2506	