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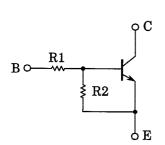
TOSHIBA Transistor Silicon PNP Epitaxial Type (PCT Process)

### RN2601,RN2602,RN2603 RN2604,RN2605,RN2606

Switching, Inverter Circuit, Interface Circuit And Driver Circuit Applications

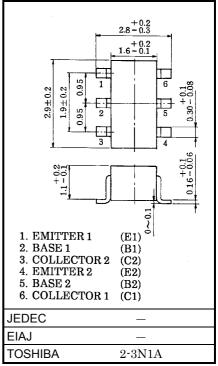
- Including two devices in SM6 (super mini type with 6 leads)
- With built-in bias resistors
- Simplify circuit design
- Reduce a quantity of parts and manufacturing process
- Complementary to RN1601~1606

### **Equivalent Circuit and Bias Resistor Values**



Type No.	R1 (kΩ)	R2 (kΩ)
RN2601	4.7	4.7
RN2602	10	10
RN2603	22	22
RN2604	47	47
RN2605	2.2	47
RN2606	4.7	47

Unit in mm

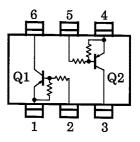


Weight: 0.015g

### **Equivalent Circuit (Top View)**

### Maximum Ratings (Ta = 25°C) (Q1, Q2 Common)

Characteristi	Symbol	Rating	Unit		
Collector-base voltage	RN2601~2606	$V_{CBO}$	-50	V	
Collector-emitter voltage	KN2001-2000	V <sub>CEO</sub>	-50	V	
Emitter-base voltage	RN2601~2604	V	-10	V	
	RN2605, 2606	V <sub>EBO</sub>	-5		
Collector current		I <sub>C</sub>	-100	mA	
Collector power dissipation	RN2601~2606	P <sub>C</sub> *	300	mW	
Junction temperature	KN2001-2000	Tj	150	°C	
Storage temperature range		T <sub>stg</sub>	-55~150	°C	

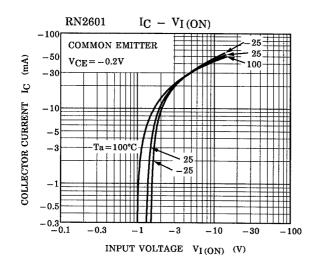


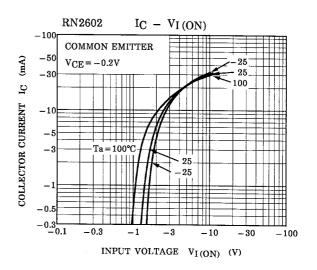
<sup>\*</sup> Total rating

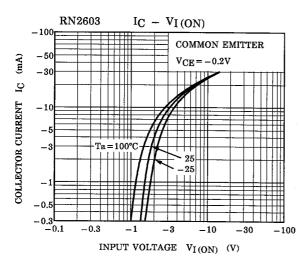
### Electrical Characteristics (Ta = 25°C) (Q1, Q2 common)

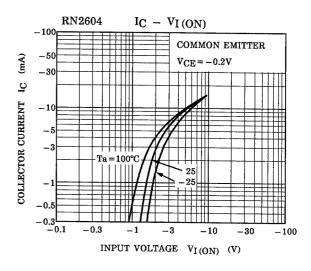
Characteristic		Symbol	Test Circuit	Test Condition	Min	Тур.	Max	Unit
Collector cut-off current	RN2601~2606	I <sub>CBO</sub>	_	$V_{CB} = -50V, I_{E} = 0$	_	_	-100	nA
		I <sub>CEO</sub>	_	$V_{CE} = -50V, I_B = 0$	_	_	-500	
Emitter cut-off current	RN2601	I <sub>EBO</sub>	_	V <sub>EB</sub> = −10V, I <sub>C</sub> = 0	-0.82	_	-1.52	mA
	RN2602		_		-0.38	_	-0.71	
	RN2603		_		-0.17	_	-0.33	
	RN2604		_		-0.082	_	-0.15	
	RN2605		_	V <sub>EB</sub> = -5V, I <sub>C</sub> = 0	-0.078	_	-0.145	
	RN2606		_		-0.074	_	-0.138	
	RN2601		_		30	_	_	
	RN2602		_		50	_	_	
DO summent main	RN2603	<b>L</b>	_	V <sub>CE</sub> = −5V	70	_	_	
DC current gain	RN2604	h <sub>FE</sub>	_	I <sub>C</sub> = -10mA	80	_	_	_
	RN2605		_		80	_	_	
	RN2606		_		80	_	_	
Collector-emitter saturation voltage	RN2601~2606	V <sub>CE</sub> (sat)	_	I <sub>C</sub> = -5mA I <sub>B</sub> = -0.25mA	_	-0.1	-0.3	٧
Input voltage (ON)	RN2601	V <sub>I</sub> (ON)	_	V <sub>CE</sub> = -0.2V I <sub>C</sub> = -5mA	-1.1	_	-2.0	- V
	RN2602		_		-1.2	_	-2.4	
	RN2603		_		-1.3	_	-3.0	
	RN2604		_		-1.5	_	-5.0	
	RN2605		_		-0.6	_	-1.1	
	RN2606		_		-0.7	_	-1.3	
land to the sec (OFF)	RN2601~2604	V <sub>I (OFF)</sub>	_	V <sub>CE</sub> = -5V, I <sub>C</sub> = -0.1mA	-1.0	_	-1.5	V
Input voltage (OFF)	RN2605, 2606		_		-0.5	_	-0.8	
Translation frequency	RN2601~2606	f <sub>T</sub>	_	$V_{CE} = -10V$ , $I_{C} = -5mA$	_	200	_	MHz
Collector output capacitance	RN2601~2606	C <sub>ob</sub>	_	V <sub>CB</sub> = -10V, I <sub>E</sub> = 0 f = 1MHz	_	3	6	pF
Input resistor	RN2601	R1	_	_	3.29	4.7	6.11	kΩ
	RN2602		_		7	10	13	
	RN2603		_		15.4	22	28.6	
	RN2604		_		32.9	47	61.1	
	RN2605		_		1.54	2.2	2.86	
	RN2606		_		3.29	4.7	6.11	
Resistor ratio	RN2601~2604	R1/R2	_	_	0.9	1.0	1.1	_
	RN2605		_		0.0421	0.0468	0.0515	
	RN2606		_		0.09	0.1	0.11	

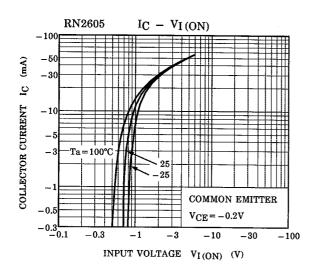
### (Q1, Q2 Common)

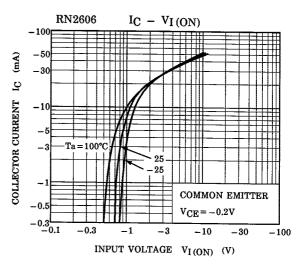






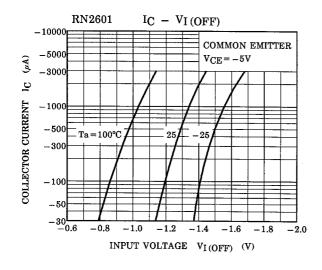


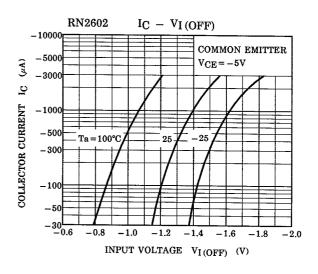


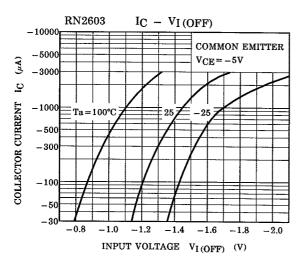


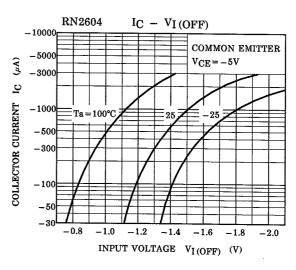
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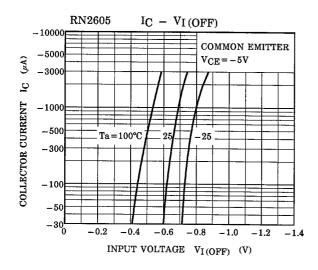
### (Q1, Q2 Common)

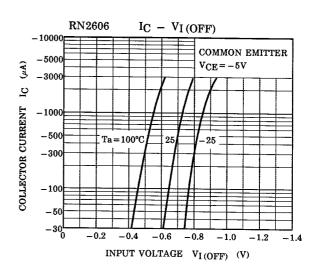




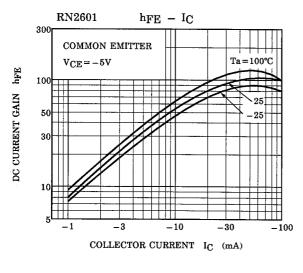


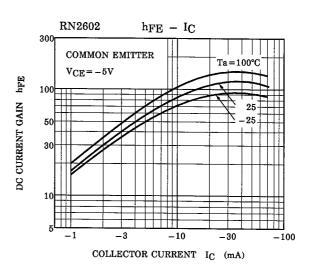


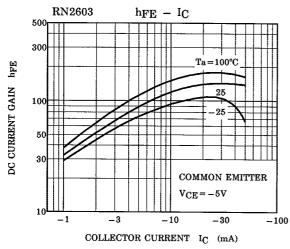


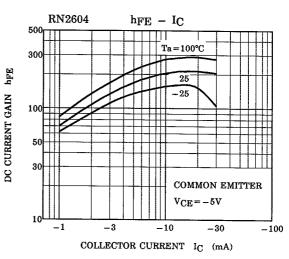


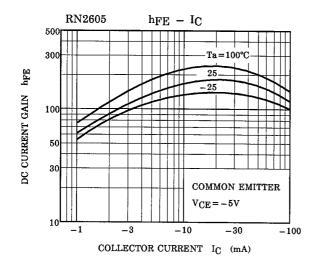
### (Q1, Q2 Common)

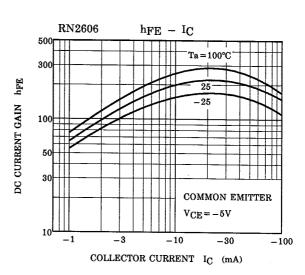












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Type Name	Marking	
RN2601	Type Name  Y A	
RN2602	Type Name  Y B	
RN2603	Type Name Y C	
RN2604	Type Name Y D	
RN2605	Type Name YE	
RN2606	Type Name  YF	

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