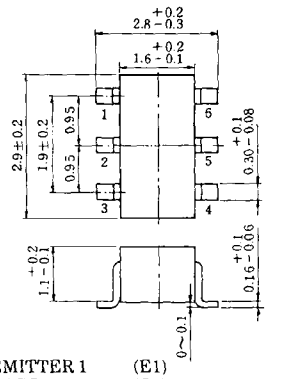
RN2607~RN2609

SILICON PNP EPITAXIAL TYPE

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 RN1607~RN1609

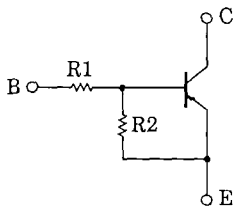
Unit in mm



1. EMITTER 1	(E1)
2. BASE 1	(B1)
3. COLLECTOR 2	(C2)
4. EMITTER 2	(E2)
5. BASE 2	(B2)
6. COLLECTOR 1	(C1)
JEDEC	—
EIAJ	—
TOSHIBA	2-3N1A

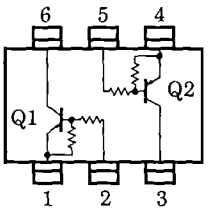
Weight : 0.015g

EQUIVALENT CIRCUIT AND BIAS RESISTOR VALUES



TYPE NO.	R1 (kΩ)	R2 (kΩ)
RN2607	10	47
RN2608	22	47
RN2609	47	22

EQUIVALENT CIRCUIT (TOP VIEW)



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

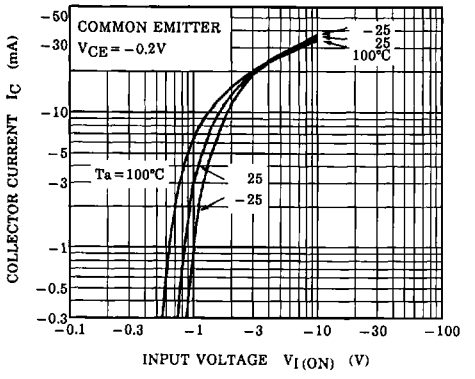
CHARACTERISTIC		SYMBOL	RATING	UNIT
Collector-Base Voltage	RN2607~2609	V_{CBO}	−50	V
Collector-Emitter Voltage		V_{CEO}	−50	V
Emitter-Base Voltage	RN2607	V_{EBO}	−6	V
	RN2608		−7	
	RN2609		−15	
Collector Current	RN2607~2609	I_C	−100	mA
Collector Power Dissipation		P_C *	300	mW
Junction Temperature		T_j	150	°C
Storage Temperature Range		T_{stg}	−55~150	°C

* : Total Rating

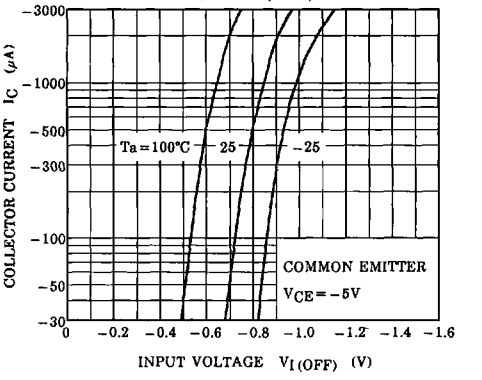
ELECTRICAL CHARACTERISTICS (Ta = 25°C) (Q1, Q2 COMMON)

CHARACTERISTIC		SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	RN2607~2609	I_{CBO}	$V_{CB}=-50V$, $I_E=0$	—	—	−100	nA
		I_{CEO}	$V_{CE}=-50V$, $I_B=0$	—	—	−500	nA
Emitter Cut-off Current	RN2607	I_{EBO}	$V_{EB}=-6V$, $I_C=0$	−0.081	—	−0.15	mA
	RN2608		$V_{EB}=-7V$, $I_C=0$	−0.078	—	−0.145	
	RN2609		$V_{EB}=-15V$, $I_C=0$	−0.167	—	−0.311	
DC Current Gain	RN2607	h_{FE}	$V_{CE}=-5V$, $I_C=-10mA$	80	—	—	
	RN2608			80	—	—	
	RN2609			70	—	—	
Collector-Emitter Saturation Voltage	RN2607~2609	$V_{CE\ (sat)}$	$I_C=-5mA$, $I_B=-0.25mA$	—	−0.1	−0.3	V
Input Voltage (ON)	RN2607	$V_{I\ (ON)}$	$V_{CE}=-0.2V$, $I_C=-5mA$	−0.7	—	−1.8	V
	RN2608			−1.0	—	−2.6	
	RN2609			−2.2	—	−5.8	
Input Voltage (OFF)	RN2607	$V_{I\ (OFF)}$	$V_{CE}=-5V$, $I_C=-0.1mA$	−0.5	—	−1.0	V
	RN2608			−0.6	—	−1.16	
	RN2609			−1.5	—	−2.6	
Transition Frequency	RN2607~2609	f_T	$V_{CE}=-10V$, $I_C=-5mA$	—	200	—	MHz
Collector Output Capacitance	RN2607~2609	C_{ob}	$V_{CB}=-10V$, $I_E=0$ f = 1MHz	—	3	6	pF
Input Resistor	RN2607	R1	—	7	10	13	kΩ
	RN2608			15.4	22	28.6	
	RN2609			32.9	47	61.1	
Resistor Ratio	RN2607	R1 / R2	—	0.191	0.213	0.232	
	RN2608			0.421	0.468	0.515	
	RN2609			1.92	2.14	2.35	

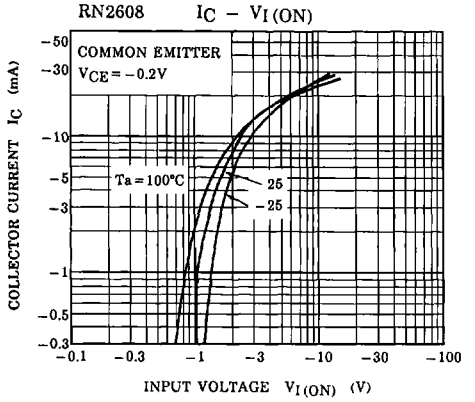
RN2607 $I_C - V_{I(ON)}$



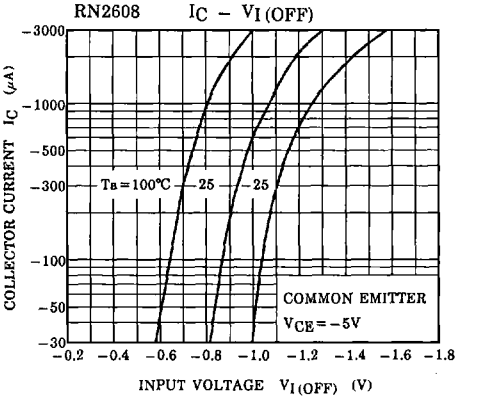
RN2607 $I_C - V_{I(OFF)}$



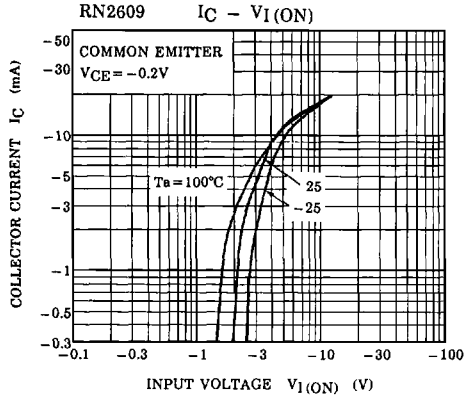
RN2608 $I_C - V_{I(ON)}$



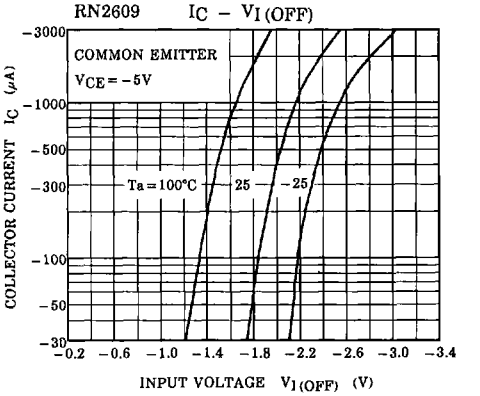
RN2608 $I_C - V_{I(OFF)}$



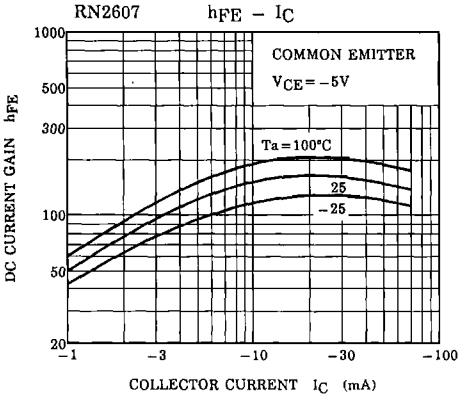
RN2609 $I_C - V_{I(ON)}$



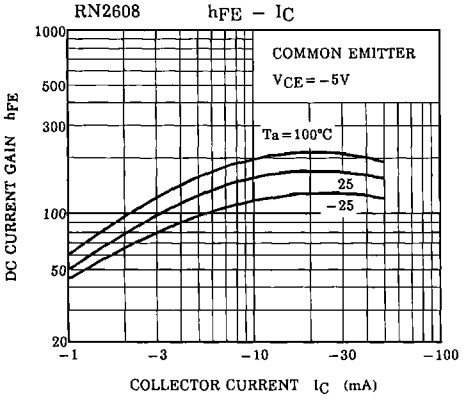
RN2609 $I_C - V_{I(OFF)}$



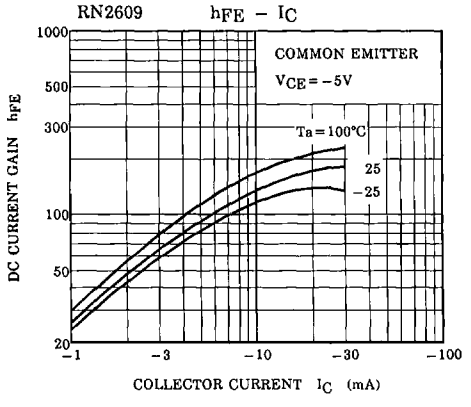
RN2607 h_{FE} – I_C

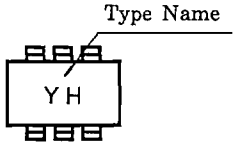
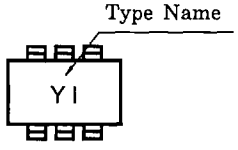


RN2608 h_{FE} – I_C



RN2609 h_{FE} – I_C



TYPE NAME	MARKING
RN2607	
RN2608	
RN2609