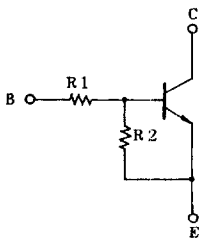


RN1421, 1422, 1423 RN1424, 1425 RN1426, 1427

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

- High Current Type ($I_C(\text{MAX.})=800\text{mA}$)
- With Built-in Bias Resistors
- Simplify Circuit Design
- Reduce a Quantity of Parts Manufacturing Process
- Low $V_{CE(\text{sat})}$
- Complementary to RN2421~2427

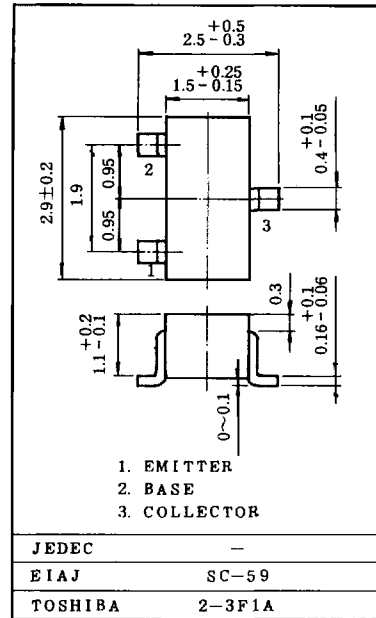
EQUIVALENT CIRCUIT



BIAS RESISTOR VALUES

TYPE NO.	R1 (k Ω)	R2 (k Ω)
RN1421	1	1
RN1422	2.2	2.2
RN1423	4.7	4.7
RN1424	10	10
RN1425	0.47	10
RN1426	1	10
RN1427	2.2	10

Unit in mm



Weight: 0.012g

MAXIMUM RATINGS ($T_a=25^\circ\text{C}$)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	V_{CBO}	50	V
Collector-Emitter Voltage	V_{CEO}	50	V
Emitter-Base Voltage	V_{EBO}	10	V
		5	
		6	
Collector Current	I_C	800	mA
Collector Power Dissipation	P_C	200	mW
Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	-55~150	$^\circ\text{C}$

RN1421, 1422, 1423
RN1424, 1425
RN1426, 1427

ELECTRICAL CHARACTERISTICS (Ta=25°C)

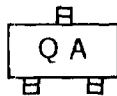
CHARACTERISTIC		SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	RN1421~1427	I_{CBO}	$V_{CB}=50V, I_E=0$	-	-	100	nA
		I_{CEO}	$V_{CE}=50V, I_B=0$	-	-	500	
Emitter Cut-off Current	RN1421	I_{EBO}	$V_{EB}=10V, I_E=0$	3.85	-	7.14	mA
	RN1422			1.75	-	3.25	
	RN1423			0.82	-	1.52	
	RN1424		0.38	-	0.71		
	RN1425		$V_{EB}=5V, I_C=0$	0.365	-	0.682	
	RN1426			0.35	-	0.65	
	RN1427			$V_{EB}=6V, I_C=0$	0.378	-	
DC Current Gain	RN1421	hFE	$V_{CE}=1V, I_C=100mA$	60	-	-	-
	RN1422			65	-	-	
	RN1423			70	-	-	
	RN1424			90	-	-	
	RN1425			90	-	-	
	RN1426			90	-	-	
	RN1427			90	-	-	
Collector-Emitter Saturation Voltage	RN1421	$V_{CE(sat)}$	$I_C=50mA, I_B=2mA$	-	-	0.25	V
	RN1422~1427		$I_C=50mA, I_B=1mA$				
Input Voltage (ON)	RN1421	$V_{I(ON)}$	$V_{CE}=0.2V$ $I_C=100mA$	1.0	-	3.5	V
	RN1422			1.4	-	4.5	
	RN1423			2.0	-	6.5	
	RN1424			3.0	-	12	
	RN1425			0.6	-	2.0	
	RN1426			0.7	-	2.5	
	RN1427			1.0	-	3.0	
Input Voltage (OFF)	RN1421~1424	$V_{I(OFF)}$	$V_{CE}=5V$ $I_C=0.1mA$	0.8	-	1.3	V
	RN1425,1426			0.4	-	0.8	
	RN1427			0.5	-	1.0	
Transition Frequency	RN1421~1427	f_T	$V_{CE}=5V, I_C=20mA$	-	300	-	MHz
Collector Output Capacitance	RN1421~1427	C_{ob}	$V_{CB}=10V, I_E=0$ $f=1MHz$	-	7	-	pF

RN1421, 1422, 1423
RN1424, 1425
RN1426, 1427

ELECTRICAL CHARACTERISTICS (Ta=25°C)

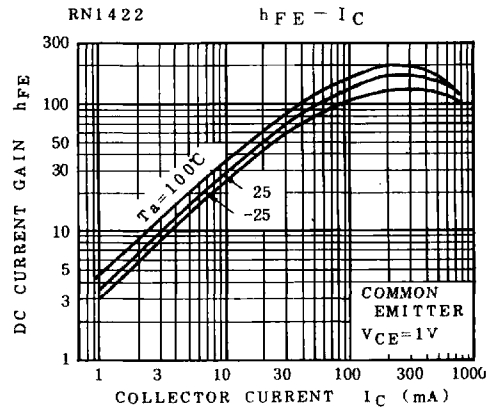
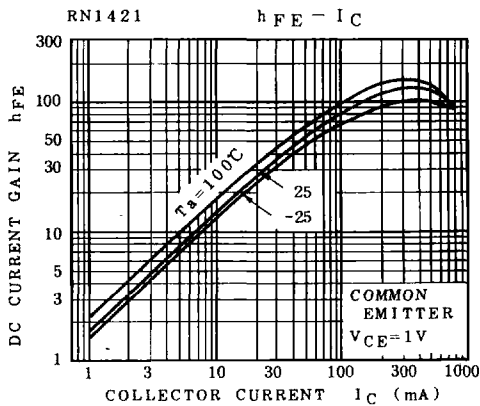
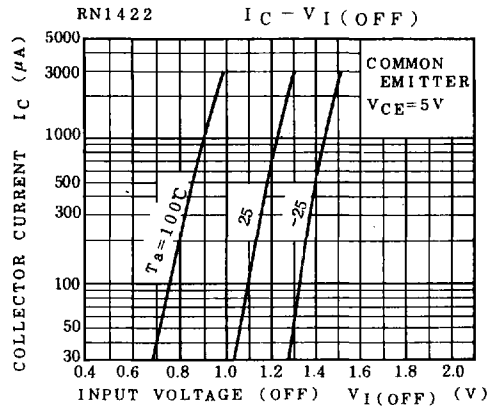
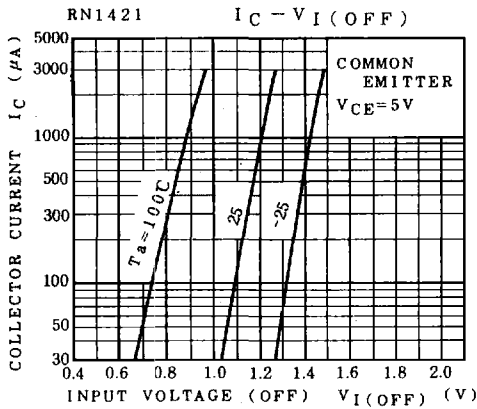
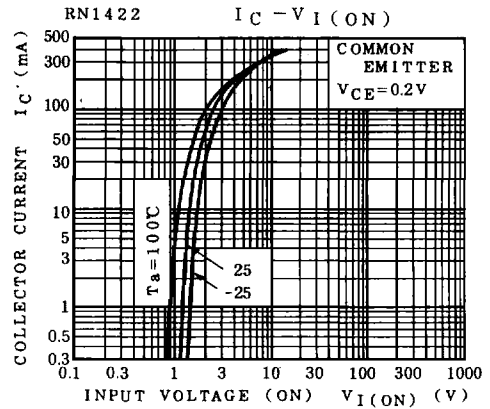
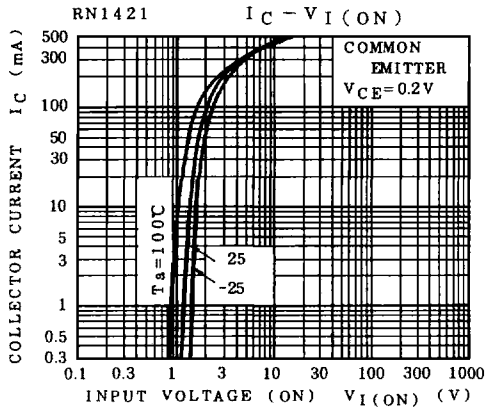
CHARACTERISTIC		SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Input Resistor	RN1421	R1		0.7	1.0	1.3	kΩ
	RN1422			1.54	2.2	2.86	
	RN1423			3.29	4.7	6.11	
	RN1424			7	10	13	
	RN1425			0.329	0.47	0.61	
	RN1426			0.7	1.0	1.3	
	RN1427			1.54	2.2	2.86	
Resistor Ratio	RN1421~1424	R1/R2		0.9	1.0	1.1	-
	RN1425			0.0423	0.047	0.0517	
	RN1426			0.09	0.1	0.11	
	RN1427			0.2	0.22	0.24	

Marking

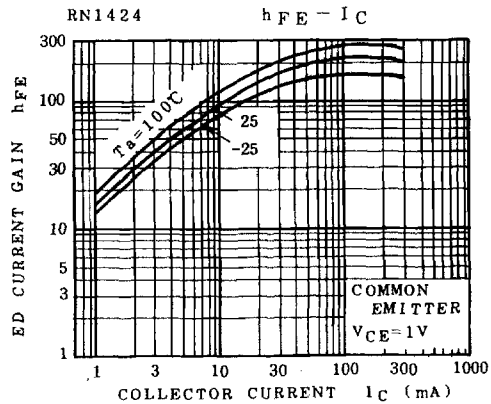
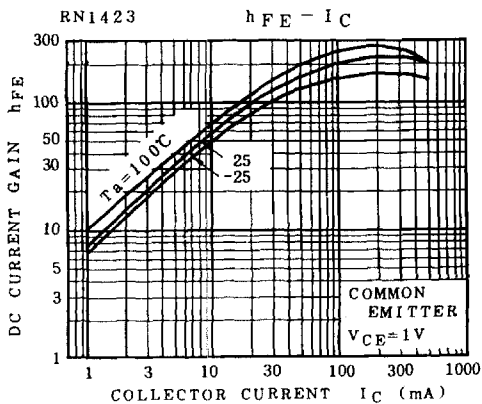
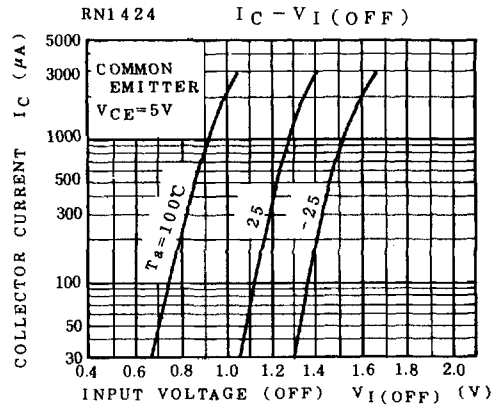
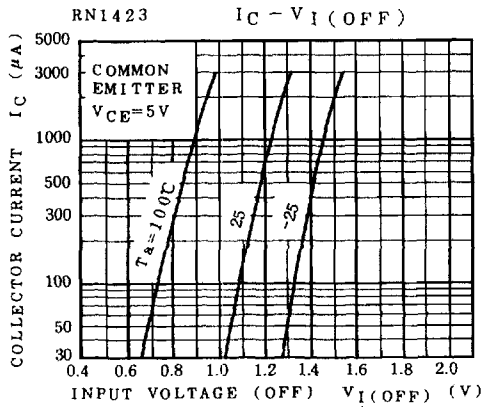
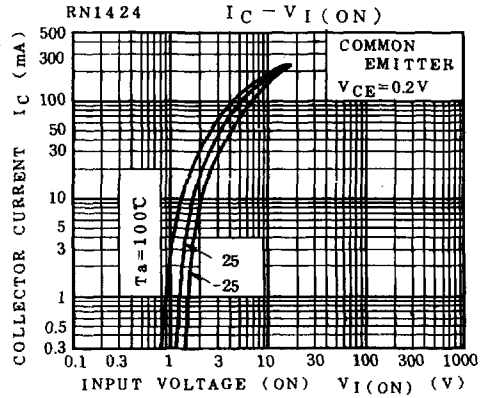
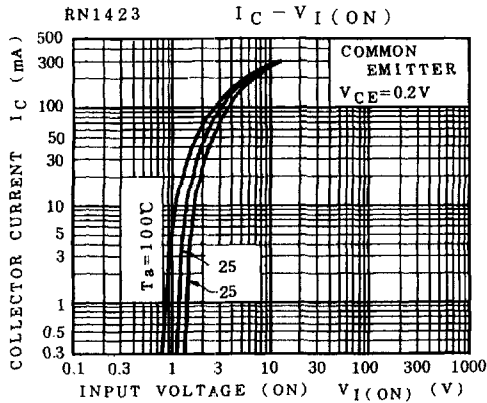


	Marking
RN1421	QA
RN1422	QB
RN1423	QC
RN1424	QD
RN1425	QE
RN1426	QF
RN1427	QG

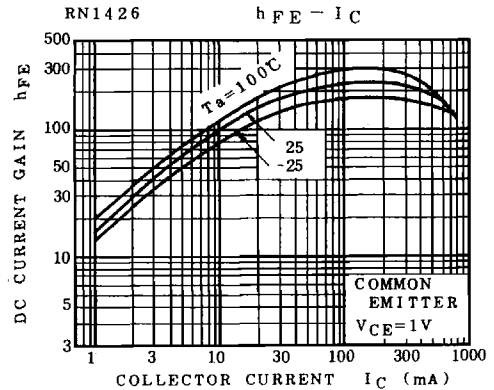
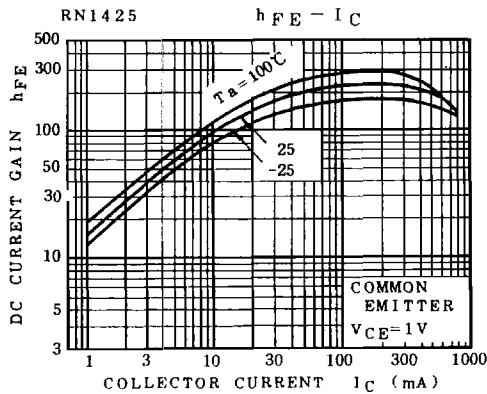
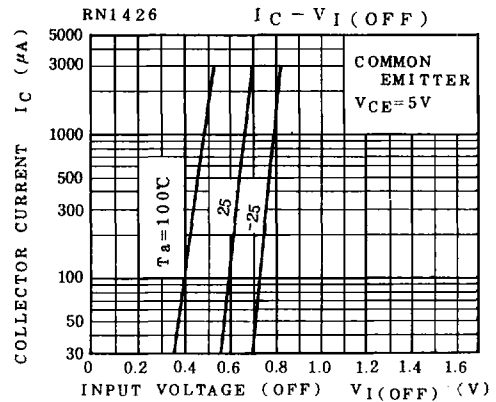
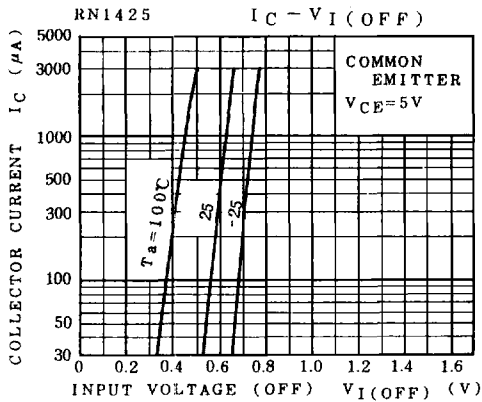
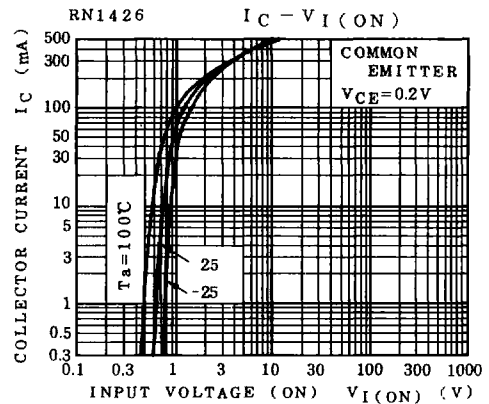
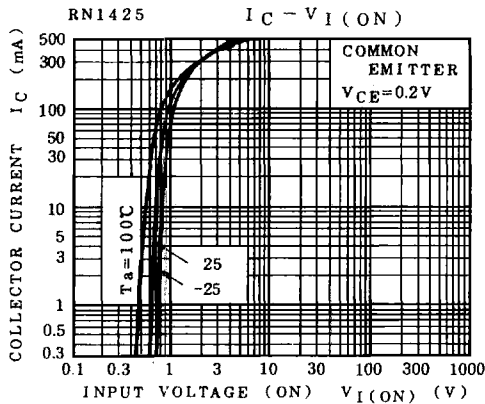
RN1421, 1422, 1423
RN1424, 1425
RN1426, 1427



RN1421, 1422, 1423
RN1424, 1425
RN1426, 1427



RN1421, 1422, 1423
RN1424, 1425
RN1426, 1427



RN1421, 1422, 1423
 RN1424, 1425
 RN1426, 1427

