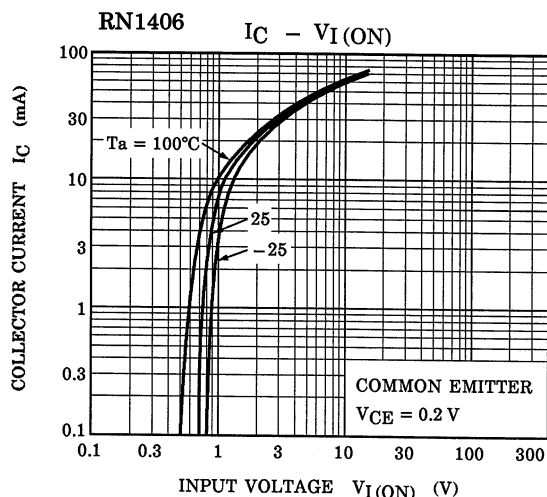
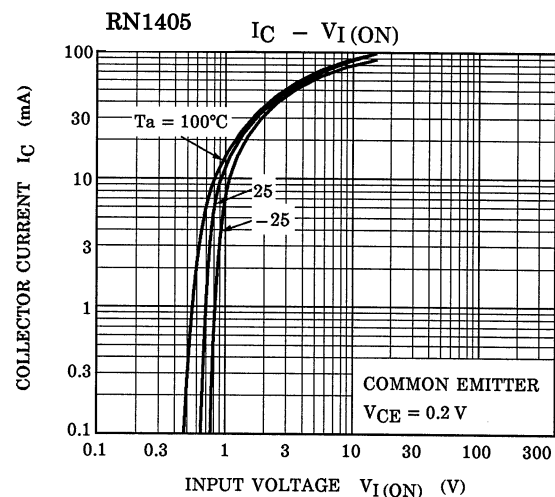
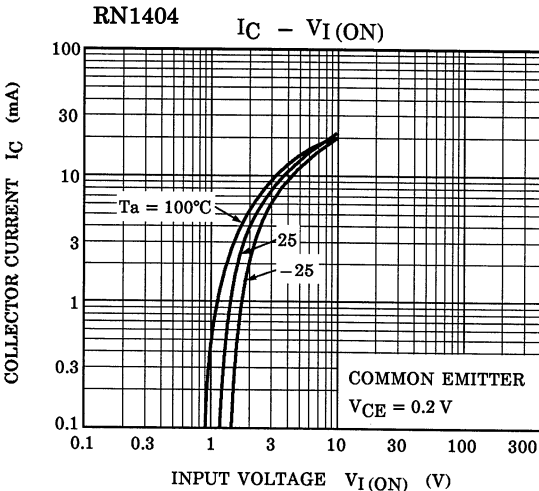
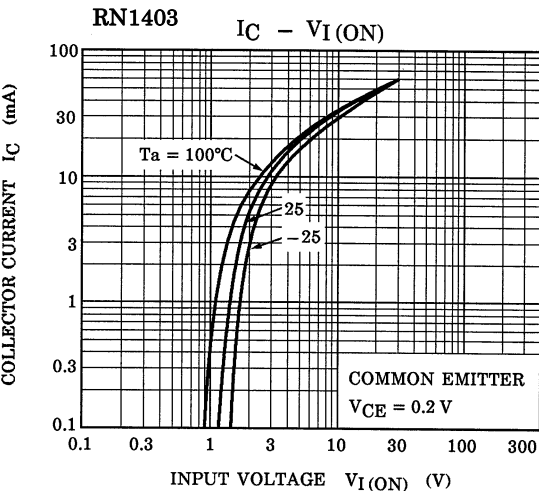
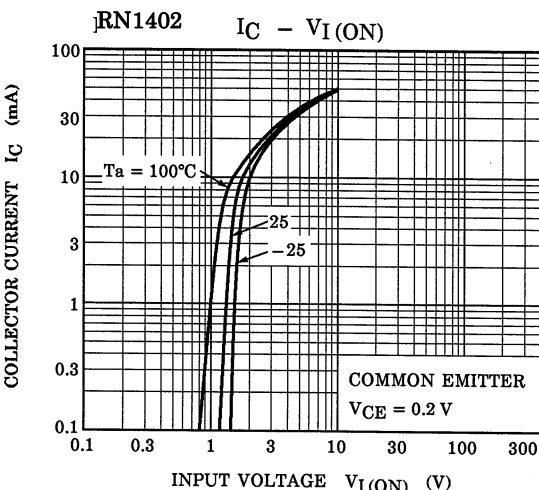
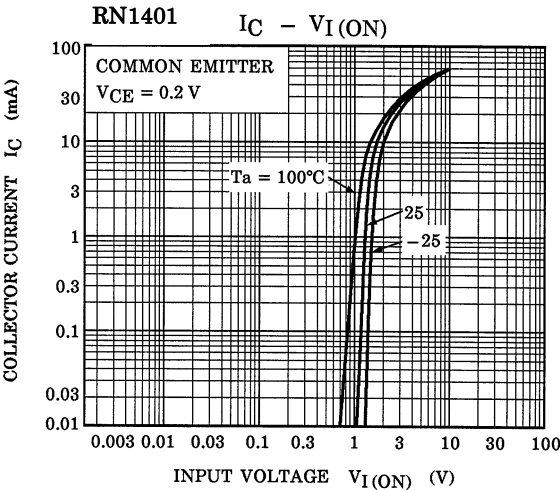
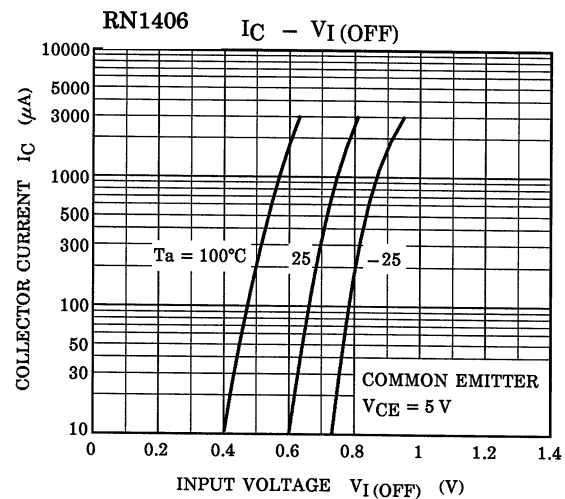
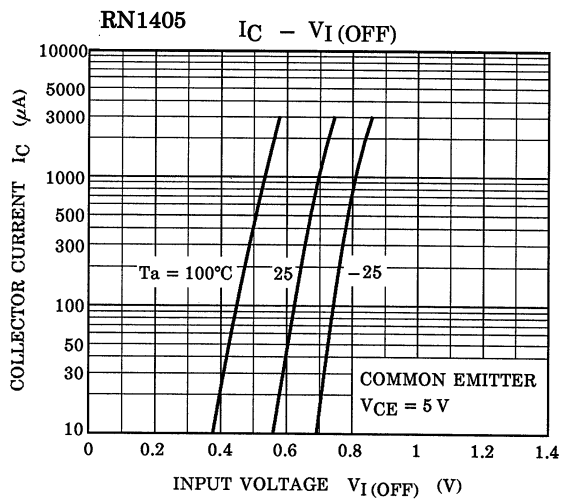
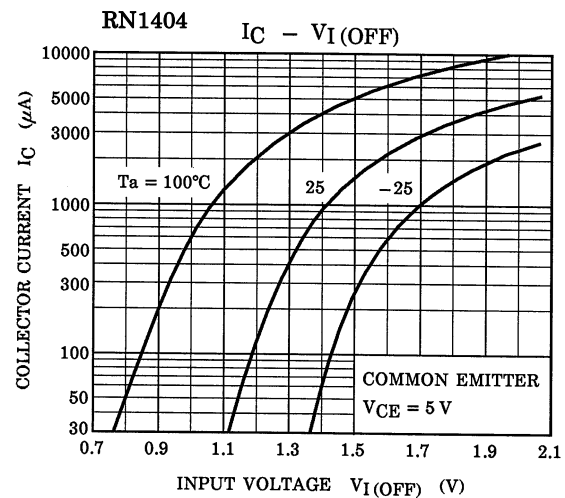
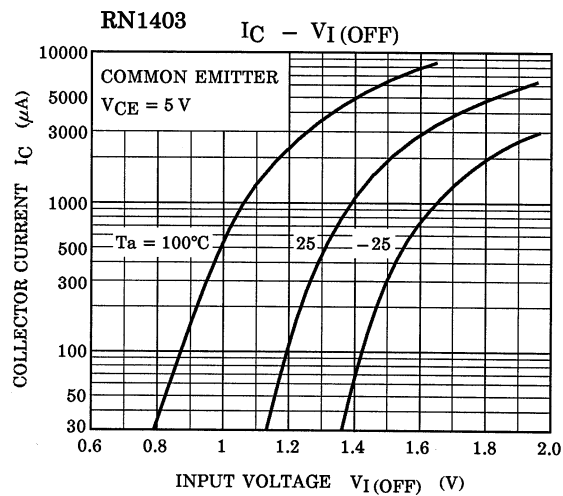
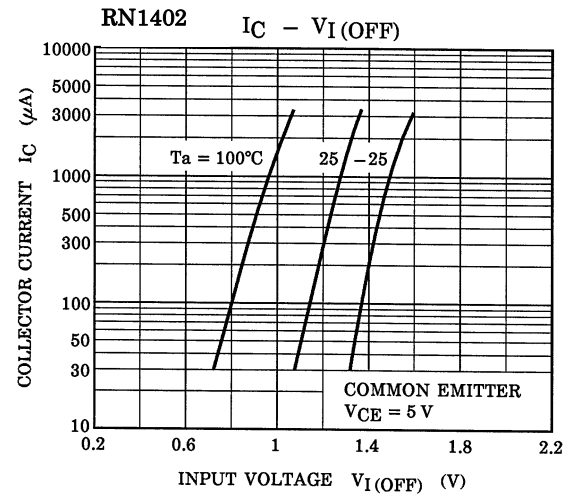
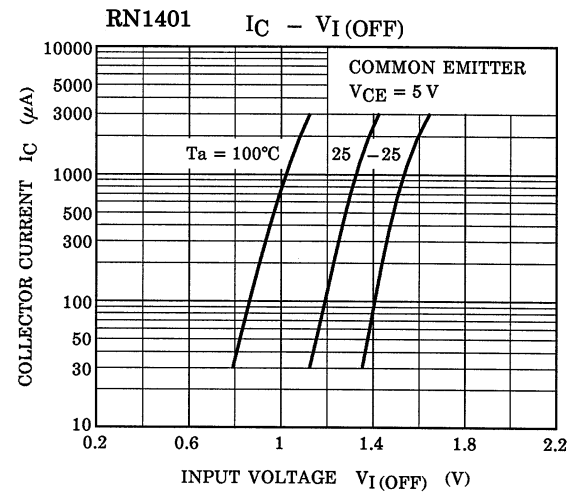
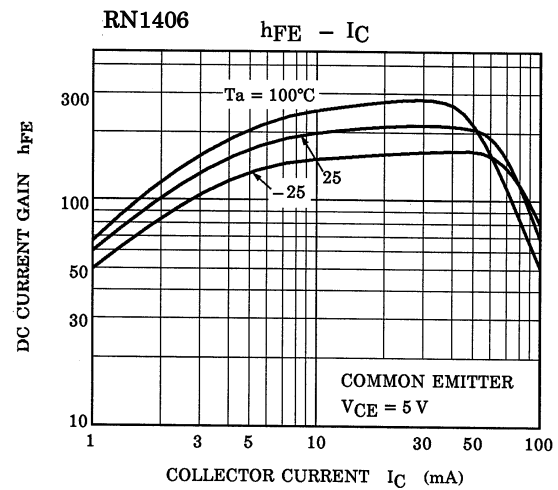
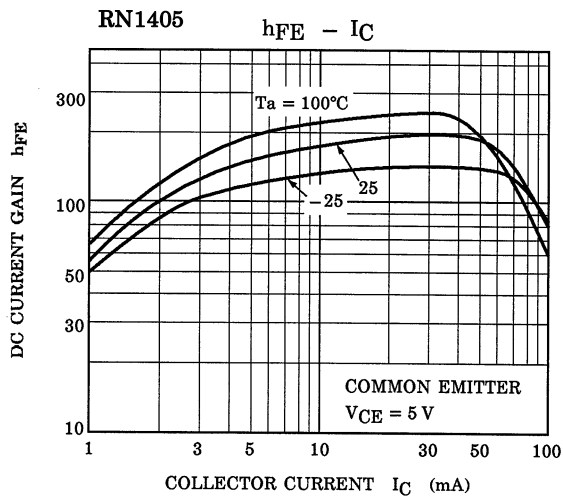
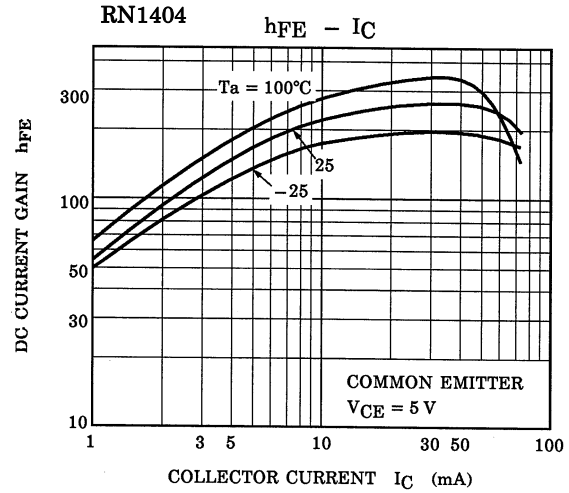
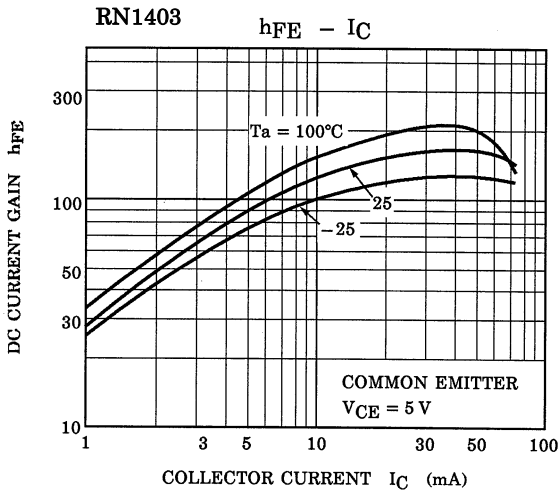
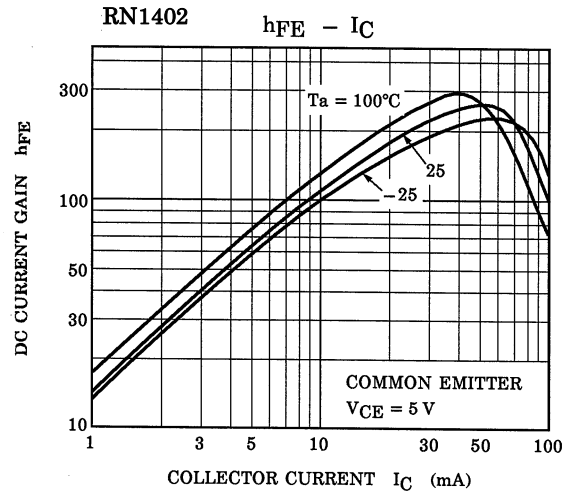
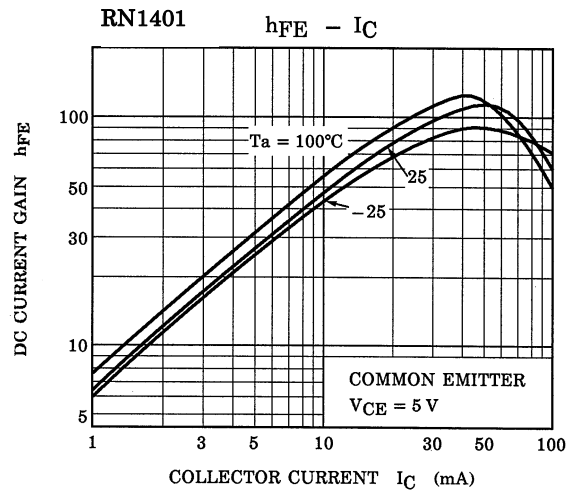


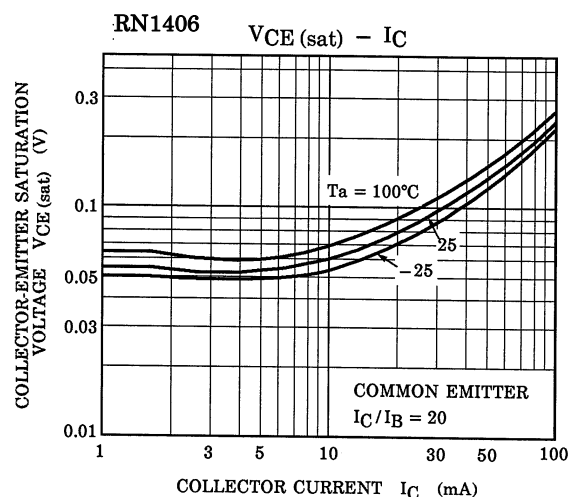
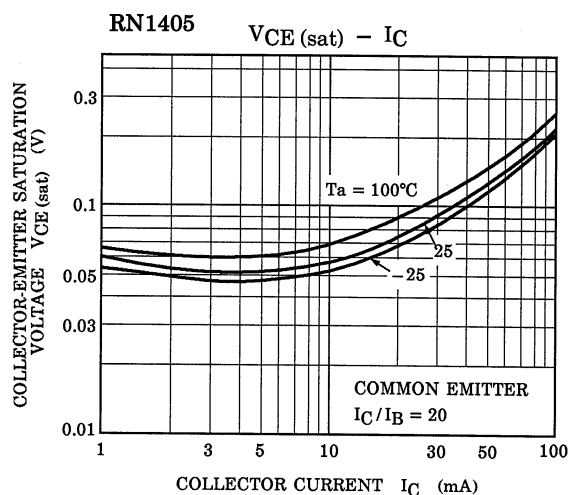
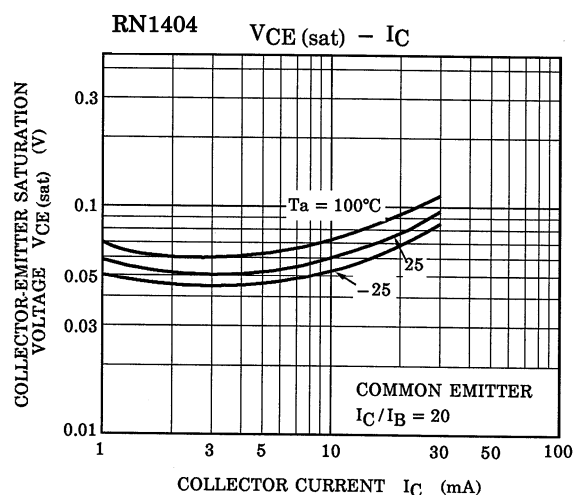
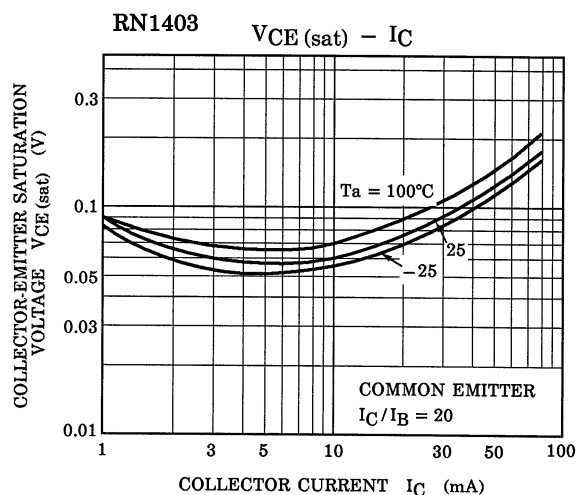
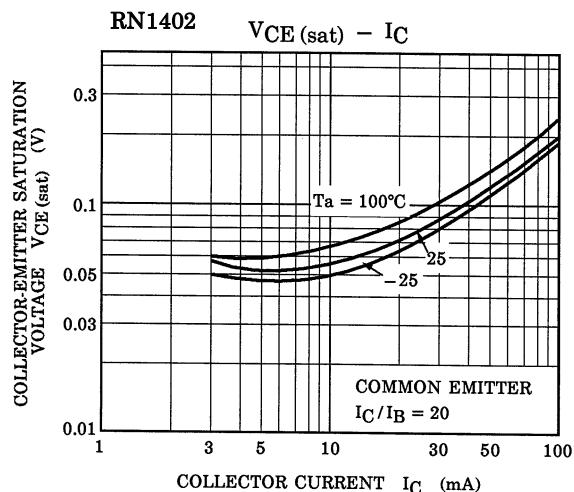
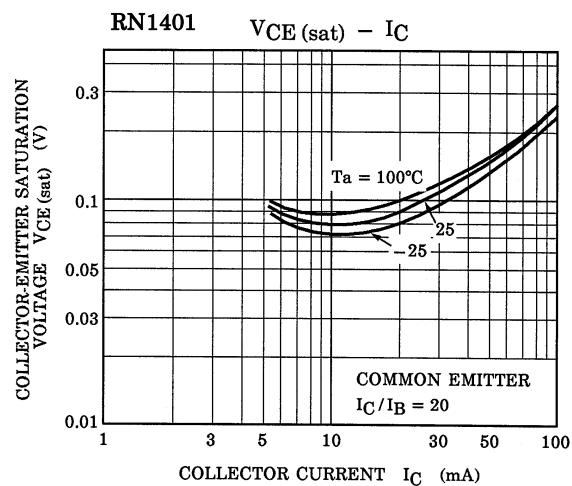
## Electrical Characteristics (Ta = 25°C)

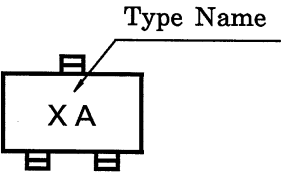
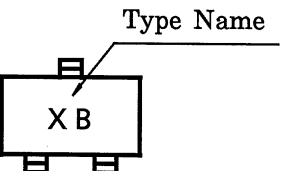
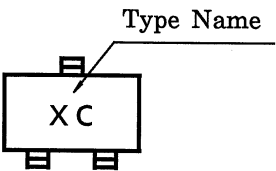
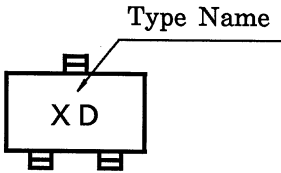
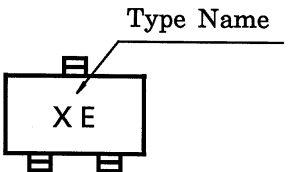
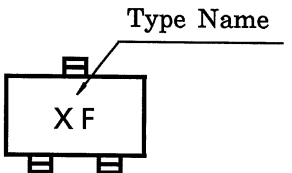
Characteristic		Symbol	Test Circuit	Test Condition	Min	Typ.	Max	Unit
Collector cut-off current	RN1401 to 1406	$I_{CBO}$	—	$V_{CB} = 50 \text{ V}, I_E = 0$	—	—	100	nA
		$I_{CEO}$		$V_{CE} = 50 \text{ V}, I_B = 0$	—	—	500	
Emitter cut-off current	RN1401	$I_{EBO}$	—	$V_{EB} = 10 \text{ V}, I_C = 0$	0.82	—	1.52	mA
	RN1402				0.38	—	0.71	
	RN1403				0.17	—	0.33	
	RN1404				0.082	—	0.15	
	RN1405			$V_{EB} = 5 \text{ V}, I_C = 0$	0.078	—	0.145	
	RN1406				0.074	—	0.138	
DC current gain	RN1401	$h_{FE}$	—	$V_{CE} = 5 \text{ V}, I_C = 10 \text{ mA}$	30	—	—	—
	RN1402				50	—	—	
	RN1403				70	—	—	
	RN1404				80	—	—	
	RN1405				80	—	—	
	RN1406				80	—	—	
Collector-emitter saturation voltage	RN1401 to 1406	$V_{CE(sat)}$	—	$I_C = 5 \text{ mA}, I_B = 0.25 \text{ mA}$	—	0.1	0.3	V
Input voltage (ON)	RN1401	$V_{I(ON)}$	—	$V_{CE} = 0.2 \text{ V}, I_C = 5 \text{ mA}$	1.1	—	2.0	V
	RN1402				1.2	—	2.4	
	RN1403				1.3	—	3.0	
	RN1404				1.5	—	5.0	
	RN1405				0.6	—	1.1	
	RN1406				0.7	—	1.3	
Input voltage (OFF)	RN1401 to 1404	$V_{I(OFF)}$	—	$V_{CE} = 5 \text{ V}, I_C = 0.1 \text{ mA}$	1.0	—	1.5	V
	RN1405, 1406				0.5	—	0.8	
Transition frequency	RN1401 to 1406	$f_T$	—	$V_{CE} = 10 \text{ V}, I_C = 5 \text{ mA}$	—	250	—	MHz
Collector Output capacitance	RN1401 to 1406	$C_{ob}$	—	$V_{CB} = 10 \text{ V}, I_E = 0, f = 1 \text{ MHz}$	—	3	6	pF
Input resistor	RN1401	R1	—	—	3.29	4.7	6.11	kΩ
	RN1402				7	10	13	
	RN1403				15.4	22	28.6	
	RN1404				32.9	47	61.1	
	RN1405				1.54	2.2	2.86	
	RN1406				3.29	4.7	6.11	
Resistor ratio	RN1401 to 1404	R1/R2	—	—	0.9	1.0	1.1	—
	RN1405				0.0421	0.0468	0.0515	
	RN1406				0.09	0.1	0.11	









Type Name	Marking
RN1401	
RN1402	
RN1403	
RN1404	
RN1405	
RN1406	

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