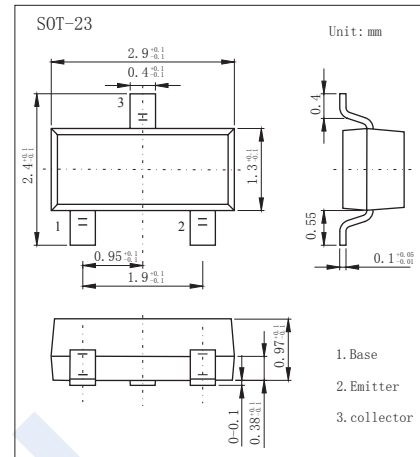


NPN Transistors

2SC3361

■ Features

- Fast switching speed.
- High breakdown voltage.
- Complementary to 2SA1331



■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

Parameter	Symbol	Rating	Unit
Collector - Base Voltage	V_{CB0}	60	V
Collector - Emitter Voltage	V_{CE0}	50	
Emitter - Base Voltage	V_{EB0}	5	
Collector Current - Continuous	I_C	150	mA
Collector Current - Pulse	I_{CP}	400	
Collector Power Dissipation	P_C	150	mW
Junction Temperature	T_J	125	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	-55 to 125	

■ Electrical Characteristics $T_a = 25^\circ\text{C}$

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector- base breakdown voltage	V_{CB0}	$I_C = 100 \mu\text{A}$, $I_E = 0$	60			V
Collector- emitter breakdown voltage	V_{CE0}	$I_C = 1 \text{ mA}$, $R_{BE} = \infty$	50			
Emitter - base breakdown voltage	V_{EB0}	$I_E = 100 \mu\text{A}$, $I_C = 0$	5			
Collector- base cut-off current	I_{CB0}	$V_{CB} = 40 \text{ V}$, $I_E = 0$			0.1	uA
Emitter cut-off current	I_{EB0}	$V_{EB} = 4 \text{ V}$, $I_C = 0$			0.1	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = 10 \text{ mA}$, $I_B = 1 \text{ mA}$		0.1	0.4	V
Base - emitter saturation voltage	$V_{BE(sat)}$	$I_C = 10 \text{ mA}$, $I_B = 1 \text{ mA}$		0.75	1.1	
DC current gain	h_{FE}	$V_{CE} = 6 \text{ V}$, $I_C = 1 \text{ mA}$	90		400	
Delay time	t_d	See specified Test Circuit		40		ns
Rise time	t_r			80		
Storage time	t_s			230		
Fall time	t_f			160		
Collector output capacitance	C_{ob}	$V_{CB} = 6 \text{ V}$, $f = 1 \text{ MHz}$		2.7		pF
Transition frequency	f_T	$V_{CE} = 6 \text{ V}$, $I_C = 1 \text{ mA}$		100		MHz

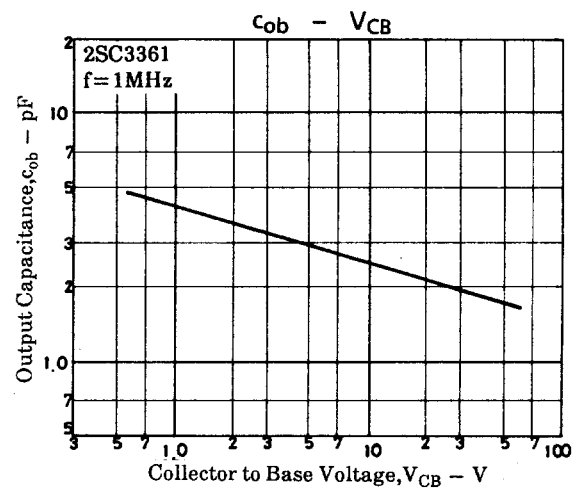
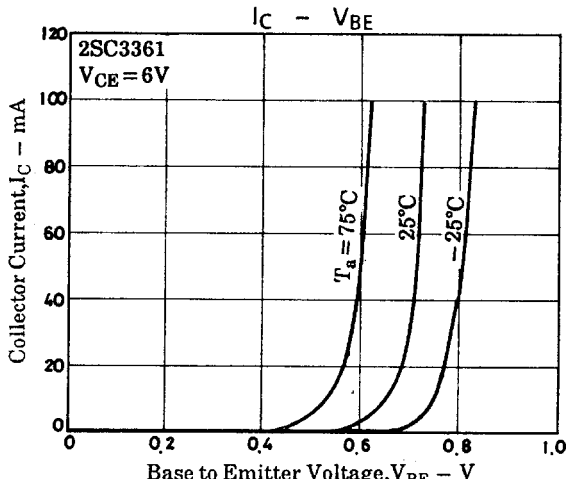
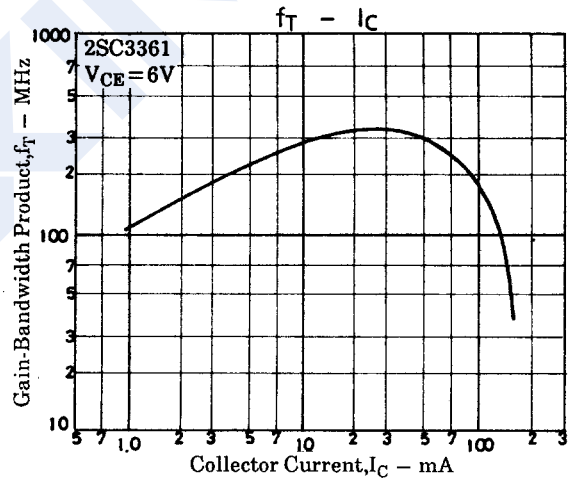
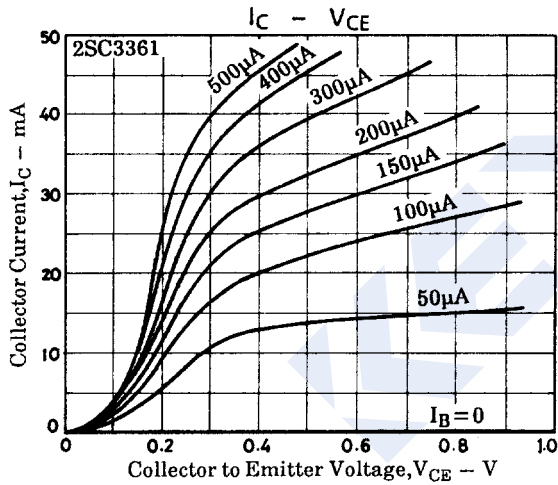
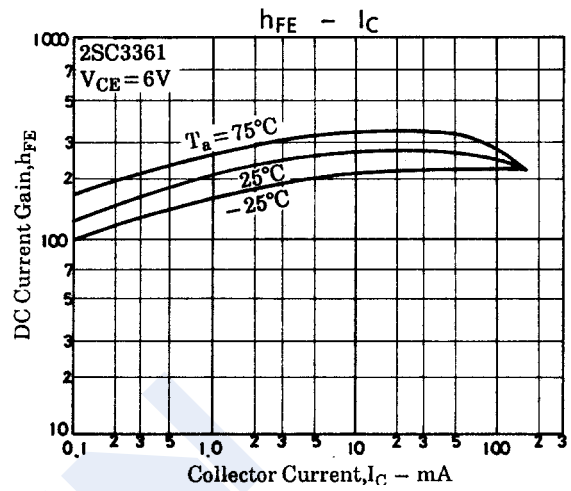
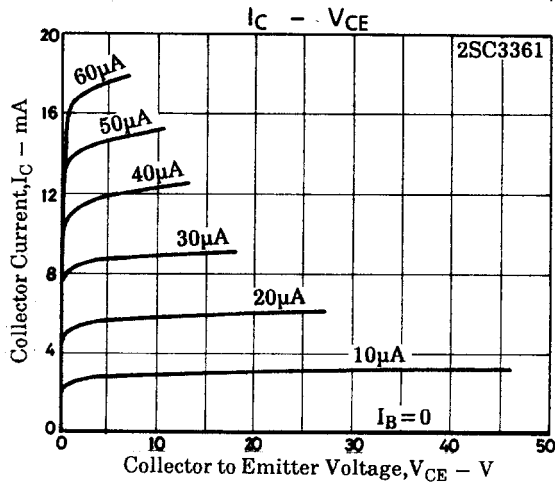
■ Classification of h_{FE}

Marking	S4	S5	S6
Range	90-180	135-270	200-400

NPN Transistors

2SC3361

■ Typical Characteristics



NPN Transistors

2SC3361

■ Typical Characteristics

