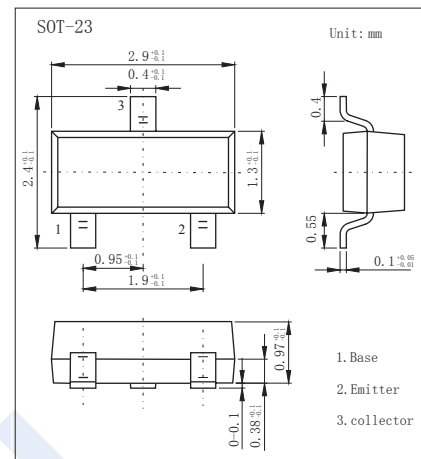


NPN Transistors

2SC3547A

■ Features

- Collector Current Capability $I_C=30\text{mA}$
- Collector Emitter Voltage $V_{CE0}=12\text{V}$

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

Parameter	Symbol	Rating	Unit
Collector - Base Voltage	V_{CB0}	20	V
Collector - Emitter Voltage	V_{CE0}	12	
Emitter - Base Voltage	V_{EB0}	3	
Collector Current - Continuous	I_C	30	mA
Base Current	I_B	15	
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}	$I_C = 100 \mu\text{A}, I_E = 0$	20			V
Collector- emitter breakdown voltage	V_{CE0}	$I_C = 1 \text{ mA}, I_B = 0$	12			
Emitter - base breakdown voltage	V_{EB0}	$I_E = 100 \mu\text{A}, I_C = 0$	3			
Collector-base cut-off current	I_{CBO}	$V_{CB} = 10\text{V}, I_E = 0$			0.1	μA
Emitter cut-off current	I_{EBO}	$V_{EB} = 1\text{V}, I_C = 0$			1	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = 30 \text{ mA}, I_B = 3 \text{ mA}$			0.5	V
Base - emitter saturation voltage	$V_{BE(sat)}$	$I_C = 30 \text{ mA}, I_B = 3 \text{ mA}$			1.2	
DC current gain	h_{FE}	$V_{CE} = 10\text{V}, I_C = 5 \text{ mA}$	35		130	
Collector-base time constant	$C_{c\text{-}rbb}$	$V_{CB} = 10\text{V}, I_C = 5 \text{ mA}, f = 30 \text{ MHz}$			10	ps
Collector output capacitance	C_{ob}	$V_{CB} = 10\text{V}, I_E = 0, f = 1 \text{ MHz}$			1.35	pF
Transition frequency	f_T	$V_{CE} = 10\text{V}, I_C = 10 \text{ mA}$	3			GHz

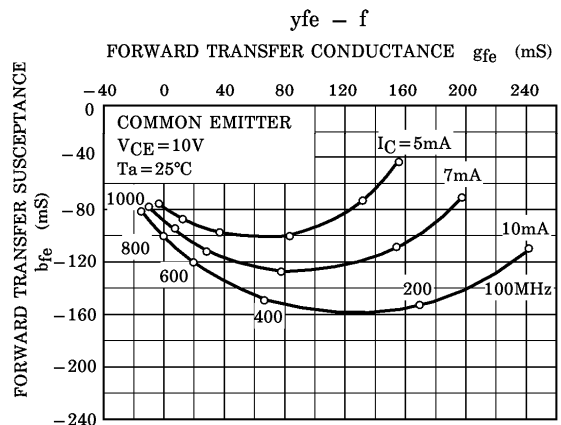
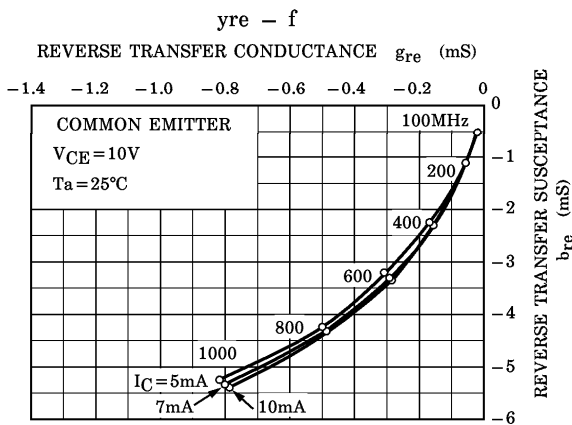
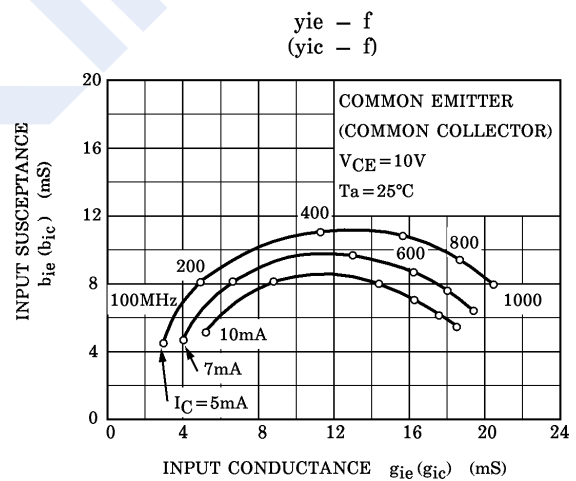
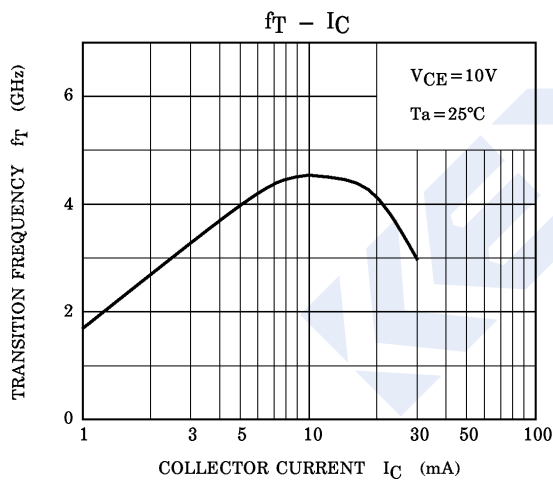
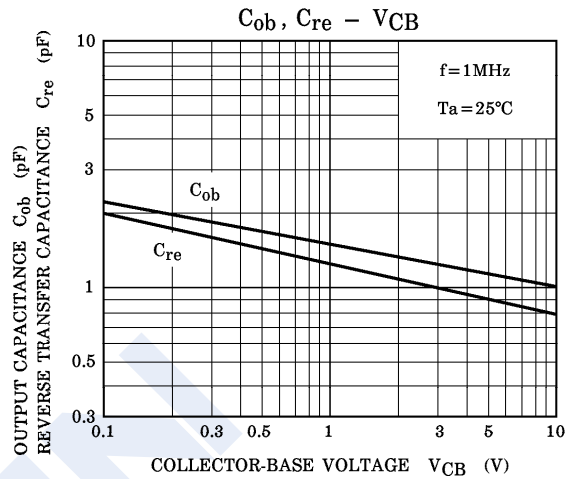
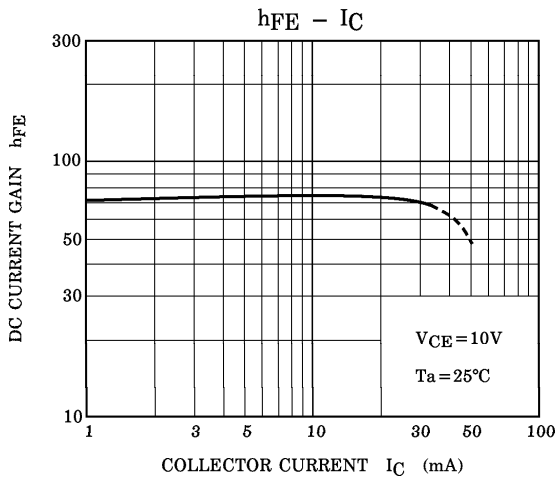
■ Marking

Marking	HI
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NPN Transistors

2SC3547A

■ Typical Characteristics



NPN Transistors

2SC3547A

■ Typical Characteristics

