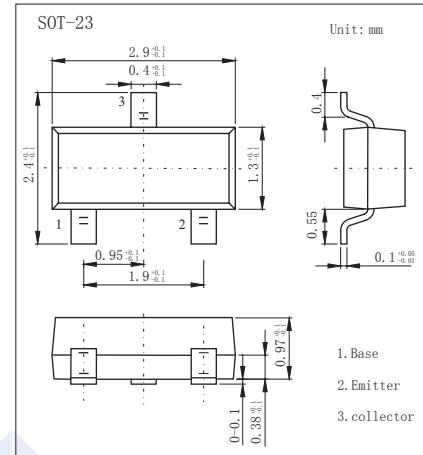


## NPN Transistors

### 2SC3125

#### ■ Features

- Collector Current Capability  $I_c=50\text{mA}$
- Collector Emitter Voltage  $V_{CE0}=25\text{V}$



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

Parameter	Symbol	Rating	Unit
Collector - Base Voltage	$V_{CBO}$	30	V
Collector - Emitter Voltage	$V_{CEO}$	25	
Emitter - Base Voltage	$V_{EBO}$	4	
Collector Current - Continuous	$I_c$	50	mA
Base Current	$I_B$	25	
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	$V_{CBO}$	$I_c = 100\ \mu\text{A}$ , $I_E = 0$	30			V
Collector- emitter breakdown voltage	$V_{CEO}$	$I_c = 10\ \text{mA}$ , $I_B = 0$	25			
Emitter - base breakdown voltage	$V_{EBO}$	$I_E = 100\ \mu\text{A}$ , $I_c = 0$	4			
Collector-base cut-off current	$I_{CBO}$	$V_{CB} = 30\ \text{V}$ , $I_E = 0$			0.1	uA
Emitter cut-off current	$I_{EBO}$	$V_{EB} = 3\ \text{V}$ , $I_c = 0$			0.1	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_c = 15\ \text{mA}$ , $I_B = 1.5\ \text{mA}$			0.2	V
Base - emitter saturation voltage	$V_{BE(sat)}$	$I_c = 15\ \text{mA}$ , $I_B = 1.5\ \text{mA}$			1.5	
DC current gain	$h_{FE}$	$V_{CE} = 10\ \text{V}$ , $I_c = 10\ \text{mA}$	20		200	
Collector-base time constant	$C_{c\ rbb'}$	$V_{CB} = 10\ \text{V}$ , $I_c = 1\ \text{mA}$ , $f = 30\ \text{MHz}$			25	ps
Collector output capacitance	$C_{ob}$	$V_{CB} = 10\ \text{V}$ , $I_E = 0$ , $f = 1\ \text{MHz}$			1.6	pF
Transition frequency	$f_T$	$V_{CE} = 10\ \text{V}$ , $I_c = 10\ \text{mA}$	250			MHz

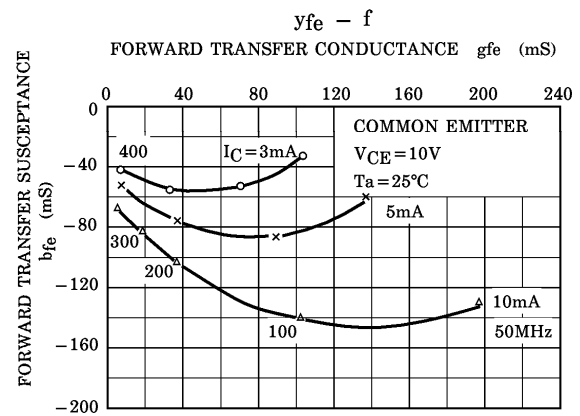
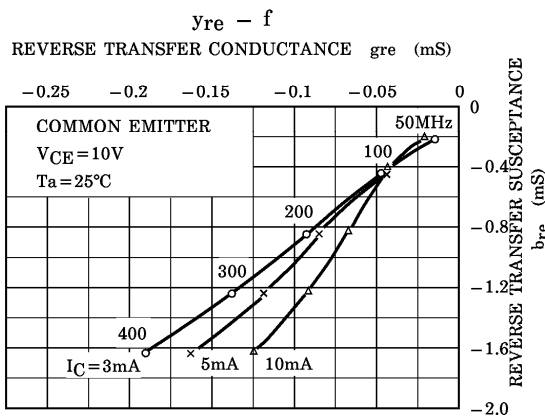
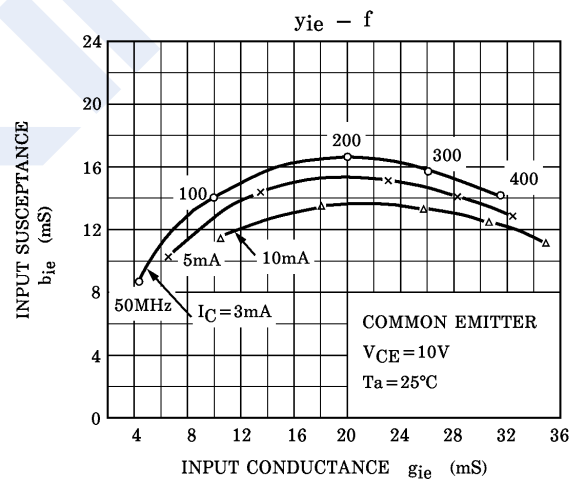
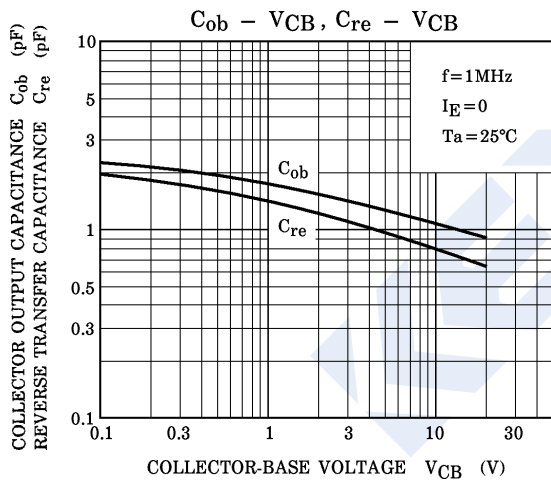
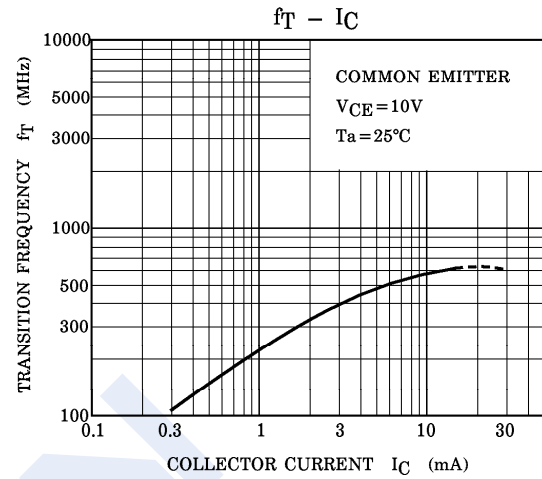
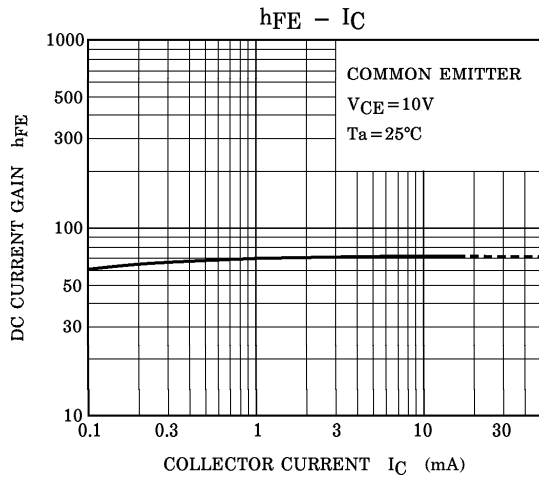
#### ■ Marking

Marking	HH
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# NPN Transistors

## 2SC3125

### Typical Characteristics



### NPN Transistors

### 2SC3125

■ Typical Characteristics

