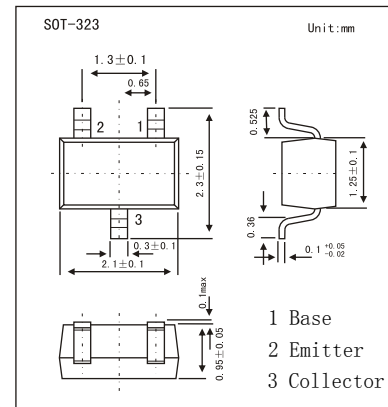


## NPN Transistors

## 2SC3929A

## ■ Features

- Low noise voltage NV.
- High forward current transfer ratio hFE.
- Complementary to 2SA1531A

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

Parameter	Symbol	Rating	Unit
Collector - Base Voltage	$V_{CB0}$	55	V
Collector - Emitter Voltage	$V_{CE0}$	55	
Emitter - Base Voltage	$V_{EB0}$	5	
Collector Current - Continuous	$I_C$	50	mA
Peak Collector Current	$I_{CP}$	100	
Collector Power Dissipation	$P_C$	150	mW
Junction Temperature	$T_J$	150	$^\circ\text{C}$
Storage Temperature Range	$T_{stg}$	-55 to 150	

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

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector- base breakdown voltage	$V_{CB0}$	$I_C = 100 \mu\text{A}, I_E = 0$	55			V
Collector- emitter breakdown voltage	$V_{CE0}$	$I_C = 2 \text{ mA}, I_B = 0$	55			
Emitter - base breakdown voltage	$V_{EB0}$	$I_E = 100 \mu\text{A}, I_C = 0$	5			
Collector-base cut-off current	$I_{CB0}$	$V_{CB} = 50\text{V}, I_E = 0$			0.1	$\mu\text{A}$
Collector-emitter cut-off current	$I_{CE0}$	$V_{CE} = 40\text{V}, I_B = 0$			1	
Emitter cut-off current	$I_{EB0}$	$V_{EB} = 5\text{V}, I_C = 0$			0.1	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = 100 \text{ mA}, I_B = 10 \text{ mA}$			0.6	V
Base - emitter saturation voltage	$V_{BE(sat)}$	$I_C = 100 \text{ mA}, I_B = 10 \text{ mA}$			1.2	
Base - emitter voltage	$V_{BE}$	$V_{CE} = 1\text{V}, I_C = 100 \text{ mA}$		0.7	1	
DC current gain	hFE	$V_{CE} = 5\text{V}, I_C = 2 \text{ mA}$	180		700	
Noise voltage	NV	$V_{CE} = 10\text{V}, I_C = 1 \text{ mA}, G_v = 80 \text{ dB}, R_g = 100 \text{ K}\Omega, \text{Function} = \text{FIAT}$			150	mV
Transition frequency	$f_T$	$V_{CE} = 5 \text{ V}, I_E = -2 \text{ mA}, f = 200 \text{ MHz}$		80		MHz

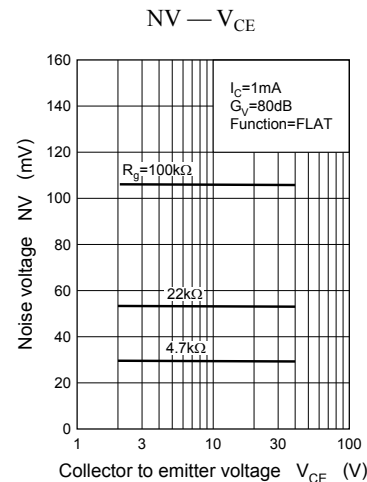
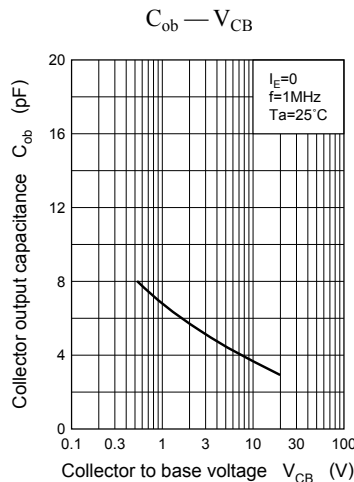
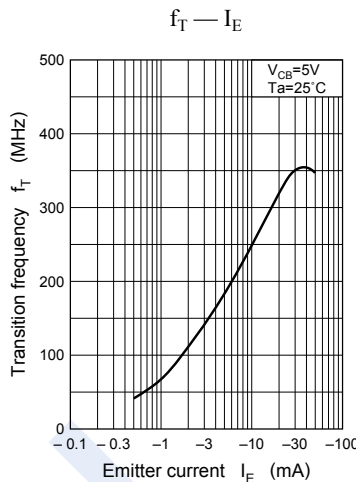
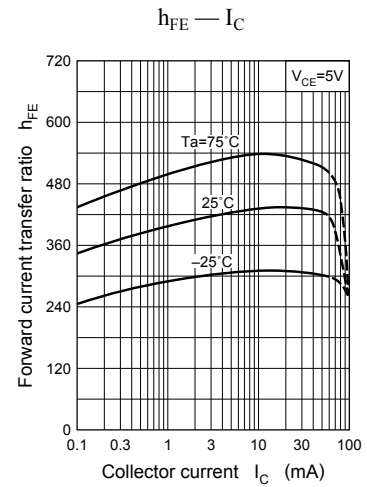
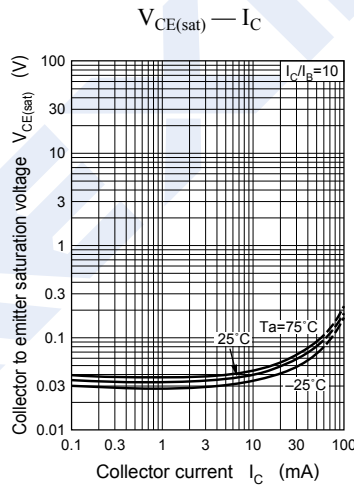
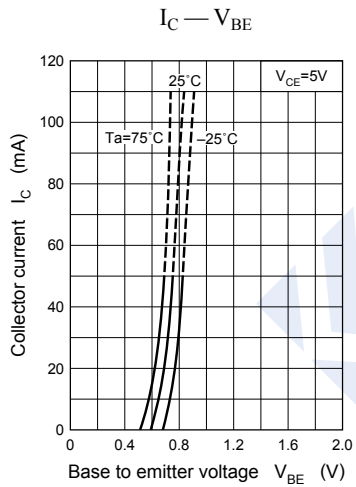
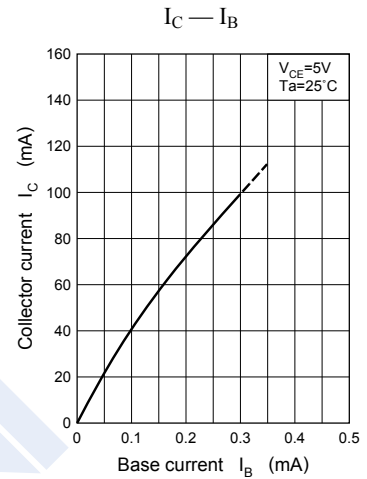
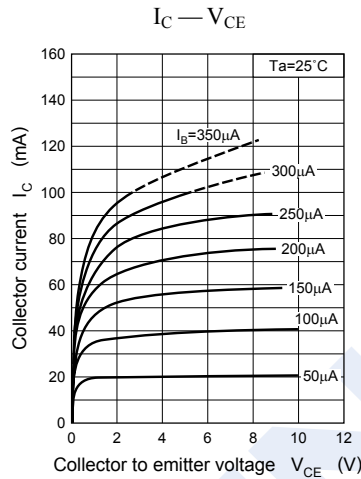
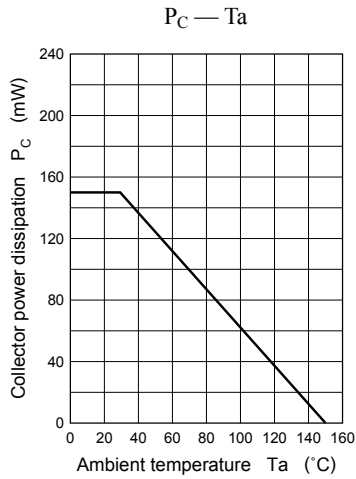
## ■ Classification of hfe

Type	2SC3929A-R	2SC3929A-S	2SC3929A-T
Range	180-360	260-520	360-700
Marking	TR	TS	TT

# NPN Transistors

## 2SC3929A

### Typical Characteristics



## NPN Transistors

### 2SC3929A

■ Typical Characteristics

