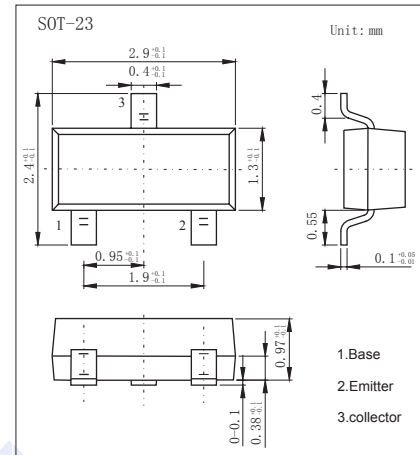


## NPN Transistors

### 2SC5232

#### ■ Features

- Collector Current Capability  $I_C=500\text{mA}$
- Collector Emitter Voltage  $V_{CE0}=12\text{V}$



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

Parameter	Symbol	Rating	Unit
Collector - Base Voltage	$V_{CB0}$	15	V
Collector - Emitter Voltage	$V_{CE0}$	12	
Emitter - Base Voltage	$V_{EB0}$	5	
Collector Current - Continuous	$I_C$	500	mA
Base Current	$I_B$	50	
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	$V_{CB0}$	$I_C = 100 \mu\text{A}$ , $I_E = 0$	15			V
Collector- emitter breakdown voltage	$V_{CE0}$	$I_C = 1 \text{mA}$ , $I_B = 0$	12			
Emitter - base breakdown voltage	$V_{EB0}$	$I_E = 100 \mu\text{A}$ , $I_C = 0$	5			
Collector-base cut-off current	$I_{CBO}$	$V_{CB} = 15 \text{V}$ , $I_E = 0$			0.1	$\mu\text{A}$
Emitter-base cut-off current	$I_{EBO}$	$V_{EB} = 5 \text{V}$ , $I_C = 0$			0.1	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = 10 \text{mA}$ , $I_B = 0.5 \text{mA}$			30	mV
		$I_C = 200 \text{mA}$ , $I_B = 10 \text{mA}$			250	
Base - emitter saturation voltage	$V_{BE(sat)}$	$I_C = 200 \text{mA}$ , $I_B = 10 \text{mA}$			1.2	V
DC current gain	$h_{FE}$	$V_{CE} = 2 \text{V}$ , $I_C = 10 \text{mA}$	300		1000	
Collector- emitter on resistance	$R_{on}$	$I_B = 1 \text{mA}$ , $V_{in} = 1 \text{V}_{rms}$ , $f = 1 \text{KHz}$		0.9		$\Omega$
Turn-on time	$t_{on}$			85	ns	
Storage time	$t_{stg}$					170
Turn-off time	$t_{off}$					40
Collector output capacitance	$C_{ob}$	$V_{CB} = 10 \text{V}$ , $I_E = 0$ , $f = 1 \text{MHz}$		4.2		pF
Transition frequency	$f_T$	$V_{CE} = 2 \text{V}$ , $I_C = 10 \text{mA}$	80			MHz

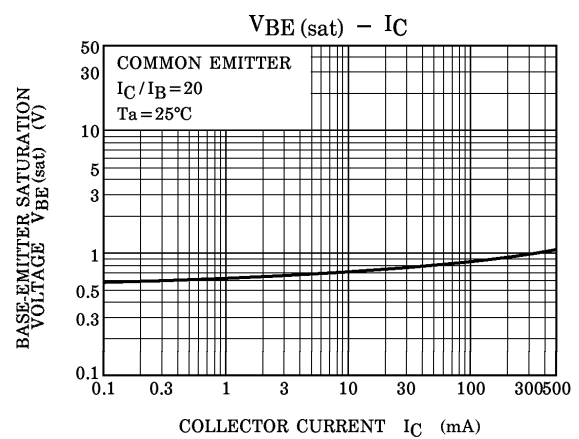
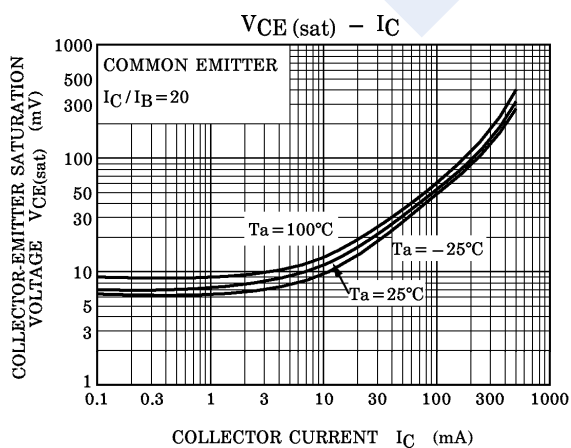
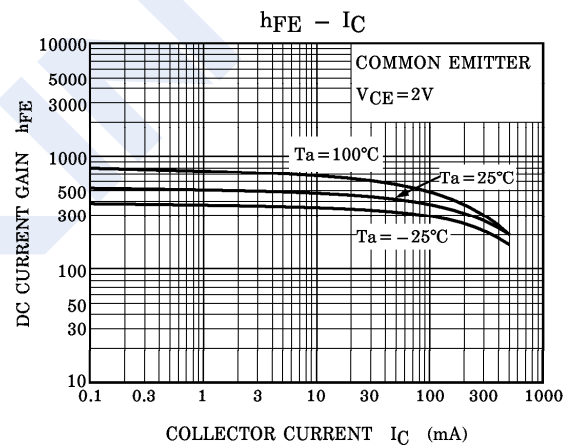
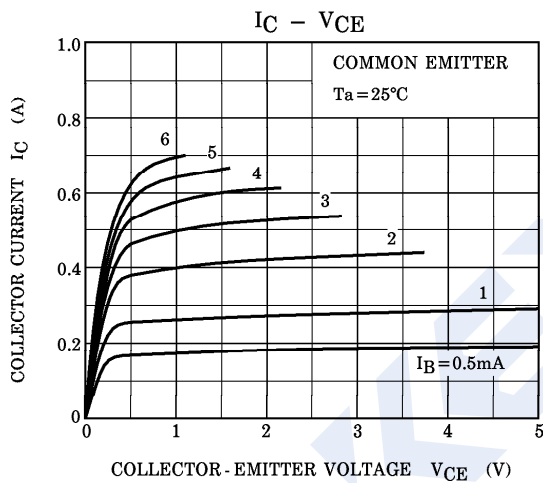
## NPN Transistors

### 2SC5232

■ Classification of h<sub>FE</sub>

Type	2SC5232-A	2SC5232-B
Range	300-600	500-1000
Marking	FA	FB

■ Typical Characteristics



## NPN Transistors

### 2SC5232

■ Typical Characteristics

