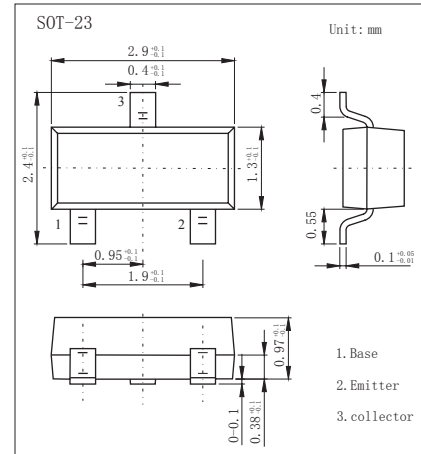


## NPN Transistors 2SC3052

■ Features

- Collector Current Capability  $I_c=100\text{mA}$
- Collector Emitter Voltage  $V_{CE0}=50\text{V}$



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

Parameter	Symbol	Rating	Unit
Collector - Base Voltage	$V_{CB0}$	50	V
Collector - Emitter Voltage	$V_{CE0}$	50	
Emitter - Base Voltage	$V_{EB0}$	6	
Collector Current - Continuous	$I_c$	100	mA
Collector Current - Pulse	$I_{cP}$	200	
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	$V_{CB0}$	$I_c = 100 \mu\text{A}, I_E = 0$	50			V
Collector- emitter breakdown voltage	$V_{CE0}$	$I_c = 1\text{mA}, I_B = 0$	50			
Emitter - base breakdown voltage	$V_{EB0}$	$I_E = 100 \mu\text{A}, I_c = 0$	6			
Collector-base cut-off current	$I_{cB0}$	$V_{CB} = 50 \text{V}, I_E = 0$			0.1	uA
Emitter cut-off current	$I_{EB0}$	$V_{EB} = 6\text{V}, I_c = 0$			0.1	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_c = 100\text{mA}, I_B = 10\text{mA}$			0.3	V
Base - emitter saturation voltage	$V_{BE(sat)}$	$I_c = 100\text{mA}, I_B = 10\text{mA}$			1	
DC current gain	$h_{FE}$	$V_{CE} = 6\text{V}, I_c = 1\text{mA}$	150		800	
		$V_{CE} = 6\text{V}, I_c = 0.1\text{mA}$	50			
Noise figure	NF	$V_{CE} = 6\text{V}, I_E = -0.1\text{mA}, f = 1\text{KHz}, R_G = 2\text{K}\Omega$			15	dB
Collector output capacitance	$C_{ob}$	$V_{CB} = 6\text{V}, I_E = 0, f = 1\text{MHz}$			4	pF
Transition frequency	$f_T$	$V_{CE} = 6\text{V}, I_c = 10\text{mA}$	180			MHz

■ Classification of  $h_{fe}(1)$

Type	2SC3052-E	2SC3052-F	2SC3052-G
Range	150-300	250-500	400-800
Marking	LE	LF	LG