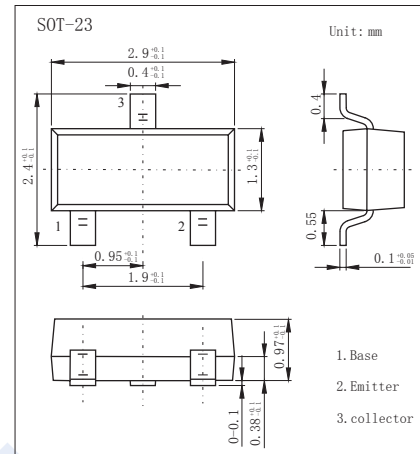


NPN Transistors

2SC2619

■ Features

- Collector Current Capability $I_c=100\text{mA}$
- Collector Emitter Voltage $V_{CE0}=30\text{V}$

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

Parameter	Symbol	Rating	Unit
Collector - Base Voltage	V_{CB0}	30	V
Collector - Emitter Voltage	V_{CE0}	30	
Emitter - Base Voltage	V_{EB0}	5	
Collector Current - Continuous	I_c	100	mA
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}	$I_c = 100 \mu\text{A}$, $I_E = 0$	30			V
Collector- emitter breakdown voltage	V_{CE0}	$I_c = 1\text{mA}$, $I_B = 0$	30			
Emitter - base breakdown voltage	V_{EB0}	$I_E = 100 \mu\text{A}$, $I_c = 0$	5			
Collector-base cut-off current	I_{CB0}	$V_{CB} = 20\text{V}$, $I_E = 0$			0.5	μA
Emitter cut-off current	I_{EB0}	$V_{EB} = 2\text{V}$, $I_c = 0$			0.5	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_c = 10\text{mA}$, $I_B = 1\text{mA}$			1.1	V
Base - emitter saturation voltage	$V_{BE(sat)}$	$I_c = 10\text{mA}$, $I_B = 1\text{mA}$			1.2	
Base - emitter voltage	V_{BE}	$V_{CE} = 12\text{V}$, $I_c = 2\text{mA}$			0.75	
DC current gain	h_{FE}	$V_{CE} = 12\text{V}$, $I_c = 2\text{mA}$	35		200	
Noise figure	NF	$V_{CE} = 6\text{V}$, $I_c = 2\text{mA}$, $f = 1\text{MHz}$, $R_g = 500\Omega$		5		dB
Collector output capacitance	C_{ob}	$V_{CB} = 10\text{V}$, $I_E = 0$, $f = 1\text{MHz}$			3.5	pF
Transition frequency	f_t	$V_{CE} = 12\text{V}$, $I_c = 2\text{mA}$		230		MHz

■ Classification of h_{FE}

Type	2SC2619-A	2SC2619-B	2SC2619-C
Range	35-75	60-120	100-200
Marking	FA	FB	FC