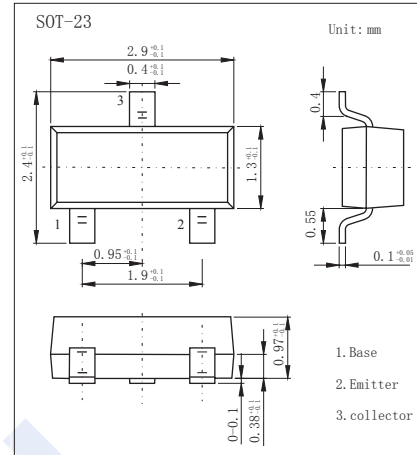


NPN Transistors

2SC3325

■ Features

- High voltage: $V_{CE0} = 50\text{ V}$ (min)
- Small package
- Complementary to 2SA1313

■ 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}	5	
Collector Current - Continuous	I_C	500	mA
Base Current	I_B	50	
Collector Power Dissipation	P_C	200	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}	$I_E = 100\ \mu\text{A}$, $I_C = 0$	5			
Collector-base cut-off current	I_{CBO}	$V_{CB} = 50\ \text{V}$, $I_E = 0$			0.1	μA
Emitter cut-off current	I_{EBO}	$V_{EB} = 5\ \text{V}$, $I_C = 0$			0.1	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = 100\ \text{mA}$, $I_B = 10\ \text{mA}$		0.1	0.25	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}	$V_{CE} = 1\ \text{V}$, $I_C = 100\ \text{mA}$		0.8	1	
DC current gain	$h_{FE(1)}$	$V_{CE} = 1\ \text{V}$, $I_C = 100\ \text{mA}$	70		240	
	$h_{FE(2)}$	$V_{CE} = 6\ \text{V}$, $I_C = 400\ \text{mA}$	O Y	25 40		
Collector output capacitance	C_{ob}	$V_{CB} = 6\ \text{V}$, $I_E = 0$, $f = 1\ \text{MHz}$		7		pF
Transition frequency	f_T	$V_{CE} = 6\ \text{V}$, $I_C = 20\ \text{mA}$		300		MHz

■ Classification of $h_{FE(1)}$

Marking	CEO	CEY
Range	70-140	120-240

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■ Typical Characteristics

