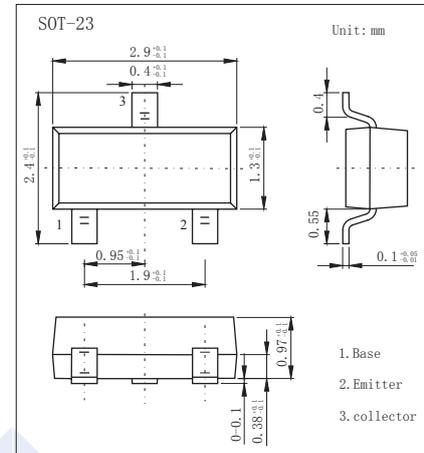


PNP Transistors

2SA1682

■ Features

- Collector Current Capability $I_c = -50\text{mA}$
- Collector Emitter Voltage $V_{CE0} = -300\text{V}$



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

Parameter	Symbol	Rating	Unit
Collector - Base Voltage	V_{CB0}	-300	V
Collector - Emitter Voltage	V_{CE0}	-300	
Emitter - Base Voltage	V_{EB0}	-5	
Collector Current - Continuous	I_c	-50	mA
Collector Current - Pulse	I_{CP}	-100	
Collector Power Dissipation	P_c	250	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}	$I_c = -100\ \mu\text{A}, I_E = 0$	-300			V
Collector- emitter breakdown voltage	V_{CE0}	$I_c = -1\ \text{mA}, I_B = 0$	-300			
Emitter - base breakdown voltage	V_{EB0}	$I_E = -100\ \mu\text{A}, I_c = 0$	-5			
Collector-base cut-off current	I_{CB0}	$V_{CB} = -200\ \text{V}, I_E = 0$			-0.1	μA
Emitter cut-off current	I_{EB0}	$V_{EB} = -4\ \text{V}, I_c = 0$			-0.1	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_c = -10\ \text{mA}, I_B = -1\ \text{mA}$			-1	V
Base - emitter saturation voltage	$V_{BE(sat)}$	$I_c = -10\ \text{mA}, I_B = -1\ \text{mA}$			-1	
DC current gain	h_{FE}	$V_{CE} = -6\ \text{V}, I_c = -0.1\ \text{mA}$	100		320	
		$V_{CE} = -6\ \text{V}, I_c = -1\ \text{mA}$	100			
Collector output capacitance	C_{ob}	$V_{CB} = -30\ \text{V}, f = 1\ \text{MHz}$		2.4		pF
Reverse transfer capacitance	C_{re}			1.5		
Transition frequency	f_T	$V_{CE} = -30\ \text{V}, I_c = -10\ \text{mA}$		70		MHz

■ Classification of $h_{FE}(1)$

Type	2SA1682-CS4	2SA1682-CS5
Range	100-200	160-320
Marking	CS4	CS5

PNP Transistors

2SA1682

■ Typical Characteristics

