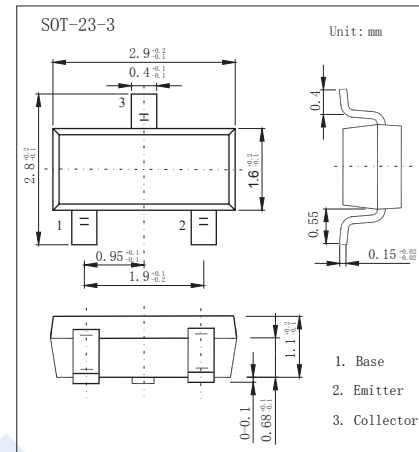


PNP Transistors

2SA1162

■ Features

- High voltage and high current
- High h_{FE} : $h_{FE} = 70\sim 400$
- Low noise: $NF = 1\text{dB (typ.)}, 10\text{dB (max)}$
- Complementary to 2SC2712



■ 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	-150	mA
Base Current	I_B	-30	
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}	$I_C = -100\ \mu\text{A}, I_E = 0$	-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_{CB0}	$V_{CB} = -50\ \text{V}, I_E = 0$			-100	nA
Emitter cut-off current	I_{EB0}	$V_{EB} = -5\ \text{V}, I_C = 0$			-100	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -100\ \text{mA}, I_B = -10\ \text{mA}$			-0.3	V
Base - emitter saturation voltage	$V_{BE(sat)}$	$I_C = -100\ \text{mA}, I_B = -10\ \text{mA}$			-1.2	
DC current gain	h_{FE}	$V_{CE} = -6\ \text{V}, I_C = -2\ \text{mA}$	70		400	
Noise figure	NF	$V_{CE} = -6\ \text{V}, I_C = -0.1\ \text{mA}, f = 1\ \text{kHz}, R_g = 10\ \text{k}\Omega$			10	dB
Collector output capacitance	C_{ob}	$V_{CB} = -10\ \text{V}, I_E = 0, f = 1\ \text{MHz}$			7	pF
Transition frequency	f_T	$V_{CE} = -10\ \text{V}, I_C = -1\ \text{mA}$	80			MHz

■ Classification of h_{FE}

Type	2SA1162-O	2SA1162-Y	2SA1162-G
Range	70-140	120-240	200-400
Marking	SO	SY	SG

PNP Transistors

2SA1162

■ Typical Characteristics

