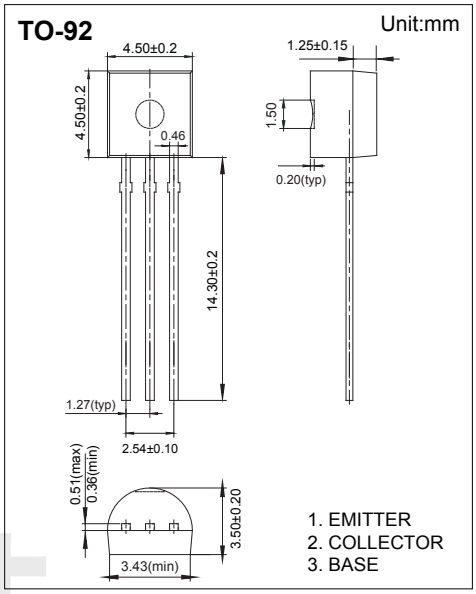
PNP Transistors

2SA1300



■ Features

- Low Saturation Voltage
- High DC Current Gain and Excellent hFE Linearity

■ Absolute Maximum Ratings Ta = 25℃

Parameter	Symbol	Rating	Unit
Collector - Base Voltage	V_{CBO}	-20	V
Collector - Emitter Voltage	V_{CEO}	-10	
Emitter - Base Voltage	V_{EBO}	-6	
Collector Current - Continuous	I_C	-2	A
Collector Power Dissipation	P_C	0.75	W
Junction Temperature	T_J	150	℃
Storage Temperature	T_{stg}	-55 to 150	

■ Electrical Characteristics Ta = 25℃

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Collecto- base breakdown voltage	V_{CBO}	I_C= -1 mA, I_E=0	-20			V
Collector- emitter breakdown voltage	V_{CEO}	I_C= -10 mA, I_B=0	-10			
Emitter - base breakdown voltage	V_{EBO}	I_E= -1 mA, I_C=0	-6			
Collector cut-off current	I_{CBO}	V_{CB}= -20 V , I_E=0			-0.1	μA
Emitter cut-off current	I_{EBO}	V_{EB}= -6V , I_C=0			-0.1	
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C=2A, I_B= -100mA			-0.82	V
Base - emitter saturation voltage	$V_{BE(sat)}$	I_C=2A, I_B= -100mA			-1.2	
Base-emitter voltage	V_{BE}	V_{CE}= -1V, I_C= -2A			-1.5	
DC current gain	h_{FE}	V_{CE}= -1V, I_C= -0.5A	140		600	
Collector Output Capacitance	C_{ob}	V_{CB}=-10V,I_E=0,f=1MHZ		50		pF
Transition frequency	f_T	V_{CE}= -1V, I_C= -0.5A,f=30MHz		140		MHz

■ Classification of hFE

Rank	Y	GR	BL
Range	140-280	200-400	300-600