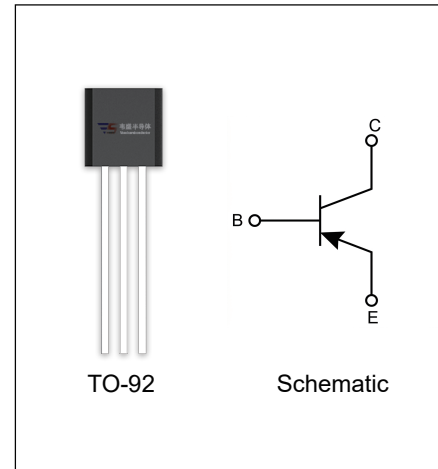


2SA1300 TRANSISTOR (PNP)

FEATURES

- High DC Current Gain and Excellent h_{FE} Linearity
- Low Saturation Voltage



MAXIMUM RATINGS ($T_a=25^{\circ}\text{C}$ unless otherwise noted)

Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage	-20	V
V_{CEO}	Collector-Emitter Voltage	-10	V
V_{EBO}	Emitter-Base Voltage	-6	V
I_C	Collector Current -Continuous	-2	A
P_D	Collector Power Dissipation	750	mW
$R_{\theta JA}$	Thermal Resistance from Junction to Ambient	166	$^{\circ}\text{C} / \text{W}$
T_J, T_{stg}	Operation Junction and Storage Temperature Range	-55~+150	$^{\circ}\text{C}$

T_a=25 °C unless otherwise specified

Parameter	S ymbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	V _{(BR)CBO}	I _C =-1mA, I _E =0	-20			V
Collector-emitter breakdown voltage	V _{(BR)CEO}	I _C =-10mA, I _B =0	-10			V
Emitter-base breakdown voltage	V _{(BR)EBO}	I _E =-1mA, I _C =0	-6			V
Collector cut-off current	I _{CBO}	V _{CB} =-20V, I _E =0			-0.1	μA
Emitter cut-off current	I _{EBO}	V _{EB} =-6V, I _C =0			-0.1	μA
DC current gain	h _{FE}	V _{CE} =-1V, I _C =-0.5A	140		600	
Collector-emittersaturation voltage	V _{CE(sat)}	I _C =-2A, I _B = -100mA			-0.82	V
Base-emitter voltage	V _{BE}	I _C = -2A, V _{CE} =-1V			-1.5	V
Transition frequency	f _T	V _{CE} =-1V, I _C = -0.5A f = 30MHz		140		MHz
Collector Output Capacitance	Cob	V _{CB} =-10V, I _E =0 f=1MHZ		50		pF

CLASSIFICATION OF h_{FE}

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