



SOT-23 Plastic-Encapsulate Transistors

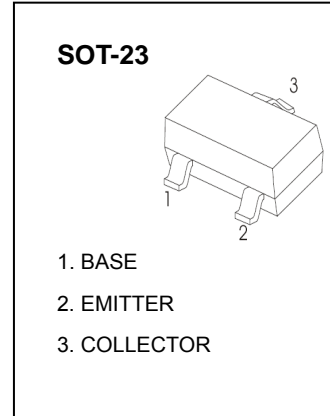
2SA1313 TRANSISTOR (PNP)

FEATURES

- Excellent h_{FE} Linearity
: $h_{FE(2)} = 25(\text{Min})$ at $V_{CE} = -6V, I_C = -400\text{mA}$.
- High Voltage : $V_{CEO} = -50V(\text{Min})$
- Complements to the 2SC3325.

MARKING : ACO,ACY

MAXIMUM RATINGS (Ta=25°C unless otherwise noted)



Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage	-50	V
V_{CEO}	Collector-Emitter Voltage	-50	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current -Continuous	-500	mA
P_C	Collector Power Dissipation	200	mW
T_J	Junction Temperature	150	°C
T_{stg}	Storage Temperature	-55~+150	°C

ELECTRICAL CHARACTERISTICS (Ta=25°C unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C = -100\mu A, I_E = 0$	-50			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = -1\text{mA}, I_B = 0$	-50			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E = -100\mu A, I_C = 0$	-5			V
Collector cut-off current	I_{CBO}	$V_{CB} = -50V, I_E = 0$			-0.1	μA
Emitter cut-off current	I_{EBO}	$V_{EB} = -5V, I_C = 0$			-0.1	μA
DC current gain	$h_{FE(1)}$	$V_{CE} = -1V, I_C = -100\text{mA}$	70		240	
	$h_{FE(2)}$	$V_{CE} = -6V, I_C = -400\text{mA}$	O Y	25 40		
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -100\text{mA}, I_B = -10\text{mA}$			-0.25	V
Base-emitter voltage	V_{BE}	$V_{CE} = -1V, I_C = -100\text{mA}$			-1	V
Transition frequency	f_T	$V_{CE} = -6V, I_C = -20\text{mA}$		200		MHz
Collector output capacitance	C_{ob}	$V_{CB} = -6V, I_E = 0, f = 1\text{MHz}$		13		pF

CLASSIFICATION OF $h_{FE(1)}$

Rank	O	Y
Range	70-140	120-240

Typical Characteristics

2SA1313

