

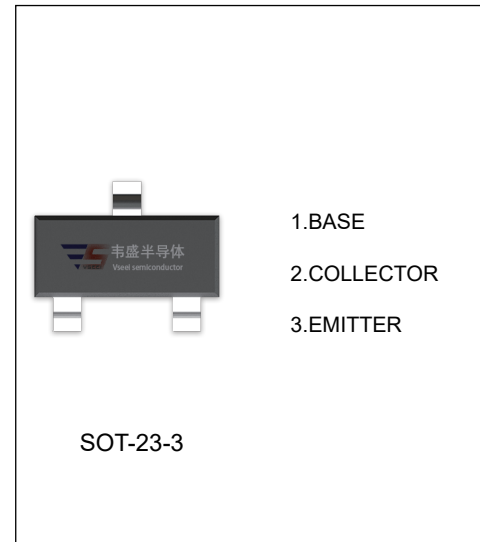
2SB709A TRANSISTOR (PNP)

FEATURES

- For general amplification
- Complementary to 2SD601A

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

Symbol	Parameter	Value	Unit
V _{CB0}	Collector-Base Voltage	-45	V
V _{CEO}	Collector-Emitter Voltage	-45	V
V _{EBO}	Emitter-Base Voltage	-7	V
I _C	Collector Current -Continuous	-100	mA
P _C	Collector Power Dissipation	200	mW
T _J , T _{stg}	Operation Junction and Storage Temperature Range	-55-150	°C



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

Parameter	Symbol	Test conditions	Min	Max	Unit
Collector-base breakdown voltage	V _{(BR)CBO}	I _C = -10 mA, I _E = 0	-45		V
Collector-emitter breakdown voltage	V _{(BR)CEO}	I _C = -2mA, I _B = 0	-45		V
Emitter-base breakdown voltage	V _{(BR)EBO}	I _E = -10 mA, I _C = 0	-7		V
Collector cut-off current	I _{CBO}	V _{CB} = -20 V, I _E = 0		-0.1	mA
Collector cut-off current	I _{CEO}	V _{CE} = -10V, I _B = 0		-100	mA
DC current gain	h _{FE}	V _{CE} = -10V, I _C = -2mA	160	460	
Collector-emitter saturation voltage	V _{CE(sat)}	I _C = -100 mA, I _B = -10mA		-0.5	V
Transition frequency	f _T	V _{CE} = -10V, I _C = -1mA f = 200MHz	60		MHz
Collector output capacitance	C _{ob}	V _{CB} = -10V, I _E = 0 f = 1MHz		2.7	pF

CLASSIFICATION OF h_{FE}

Rank	Q	R	S
Range	160-260	210-340	290-460
Marking	BQ1	BR1	BS1

