

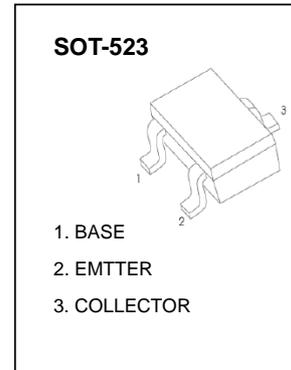
Plastic-Encapsulate Transistors

TRANSISTOR (PNP)

FEATURES

- Reduces Board Space
- High h_{FE}
- Low $V_{CE(sat)}$

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



Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage	-60	V
V_{CEO}	Collector-Emitter Voltage	-50	V
V_{EBO}	Emitter-Base Voltage	-6	V
I_C	Collector Current -Continuous	-150	mA
P_C	Collector Power Dissipation	150	mW
T_J, T_{stg}	Operation Junction and Storage Temperature Range	-55-150	$^\circ\text{C}$

ELECTRICAL CHARACTERISTICS ($T_a=25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=-50\mu\text{A}, I_E=0$	-60			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=-1.0\text{mA}, I_B=0$	-50			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=-50\mu\text{A}, I_C=0$	-6.0			V
Collector cut-off current	I_{CBO}	$V_{CB}=-60\text{V}, I_E=0$			-0.1	μA
Emitter cut-off current	I_{EBO}	$V_{EB}=-6\text{V}, I_C=0$			-0.1	μA
DC current gain	$h_{FE}^{(1)}$	$V_{CE}=-6.0\text{V}, I_C=-1.0\text{mA}$	120		560	
Collector-emitter saturation voltage	$V_{CE(sat)}^{(2)}$	$I_C=-50\text{mA}, I_B=-5.0\text{mA}$			-0.5	V
Base-emitter saturation voltage	$V_{BE(sat)}^{(2)}$	$I_C=-50\text{mA}, I_B=-5.0\text{mA}$			-1.2	V
Transition frequency	f_T	$V_{CE}=-12\text{V}, I_C=-2.0\text{mA}, f=30\text{MHz}$		140		MHz
Collector output capacitance	C_{ob}	$V_{CB}=-12\text{V}, I_E=0, f=1\text{MHz}$		3.5	5	pF

Note(1):

CLASSIFICATION OF h_{FE}

Rank	Q	R	S
Range	120-270	180-390	270-560
Marking	FQ	FR	FS

(2).Pulse Test :Pulse Width $\leq 300\mu\text{s}$,D.C $\leq 2\%$

1 of 2

