



FUKUCOM COMPANY LTD.

福 靈 有 限 公 司

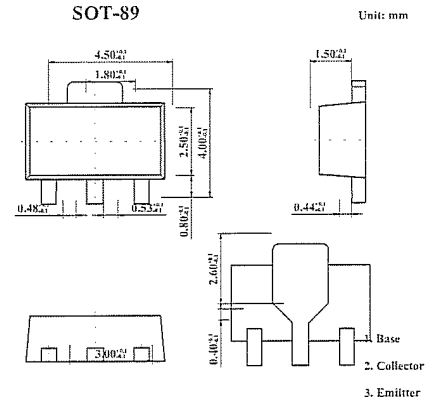
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2SC3906

PNP Epitaxial Planar Transistor

- General Purpose switching
- Amplifier applications



Absolute Maximum Ratings $T_a=25^\circ\text{C}$

Symbol	Parameter	Value	Units
V_{CBO}	Collector-Base Voltage	-40	V
V_{CEO}	Collector-Emitter Voltage	-40	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_{c}	Collector Current	-200	mA
P_{c}	Collector Dissipation	1,000	mW
T_{J}	Junction Temperature	150	$^\circ\text{C}$
T_{STG}	Storage Temperature	-55~150	$^\circ\text{C}$

Electrical Characteristics $T_a=25^\circ\text{C}$

Symbol	Parameter	Test Condition	Min.	Max.	Units
V_{CBO}	Collector-Base Breakdown Voltage	$I_{\text{c}}=-100 \mu\text{A}$, $I_{\text{E}}=0$	-60		V
V_{CEO}	Collector-Emitter Breakdown Voltage	$I_{\text{c}}=-1\text{mA}$, $I_{\text{B}}=0$	-40		V
V_{EBO}	Emitter-Base Breakdown Voltage	$I_{\text{E}}=-100 \mu\text{A}$, $I_{\text{c}}=0$	-5		V
I_{CEO}	Collector-emitter Cut-off Current	$V_{\text{CE}}=-30\text{V}$, $V_{\text{BE}}=-3\text{V}$		50	ηA
h_{FE}	DC Current Gain	$V_{\text{CE}}=-1\text{V}$, $I_{\text{c}}=-100\mu\text{A}$ $V_{\text{CE}}=-1\text{V}$, $I_{\text{c}}=-1\text{mA}$ $V_{\text{CE}}=-1\text{V}$, $I_{\text{c}}=-10\text{mA}$ $V_{\text{CE}}=-1\text{V}$, $I_{\text{c}}=-50\text{mA}$ $V_{\text{CE}}=-1\text{V}$, $I_{\text{c}}=-100\text{mA}$	60 80 100 60 30	300	
$V_{\text{CE}}(\text{sat})$	Collector-Emitter Saturation Voltage	$I_{\text{c}}=-10\text{mA}$, $I_{\text{B}}=-1\text{mA}$ $I_{\text{c}}=-50\text{mA}$, $I_{\text{B}}=-5\text{mA}$		-250 -400	mV
$V_{\text{BE}}(\text{sat})$	Base-Emitter Saturation Voltage	$I_{\text{c}}=-10\text{mA}$, $I_{\text{B}}=-1\text{mA}$ $I_{\text{c}}=-50\text{mA}$, $I_{\text{B}}=-5\text{mA}$	-650	-850 -950	mV
f_{T}	Transition Frequency	$V_{\text{CE}}=-20\text{V}$, $I_{\text{c}}=-10\text{mA}$, $f=100\text{MHz}$	250		MHz
C_{ob}	Collector Output Capacitance (Common base, input open circuited)	$V_{\text{CB}}=-5.0\text{V}$, $f=1\text{MHz}$		4.5	pF