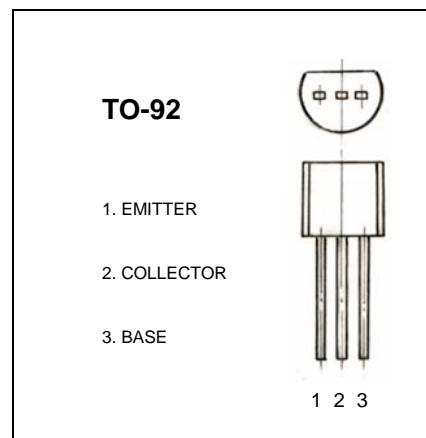


深圳市晶泰源电子有限公司

2SC2001 TRANSISTOR (NPN)

FEATURES

- High h_{FE} and low $V_{CE(sat)}$
 $h_{FE}(I_C=100mA) : 200(\text{Typ})$
 $V_{CE(sat)}(700mA) : 0.2V (\text{Typ})$



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

Symbol	Parameter	Value	Units
V_{CBO}	Collector-Base Voltage	30	V
V_{CEO}	Collector-Emitter Voltage	25	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current -Continuous	700	mA
P_c	Collector Power Dissipation	600	mW
T_j	Junction Temperature	150	°C
T_{stg}	Storage Temperature	-55-150	°C

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

Parameter	Symbol	Test conditions	MIN	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=100\mu\text{A}, I_E=0$	30		V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=10\text{mA}, I_B=0$	25		V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=100\mu\text{A}, I_C=0$	5		V
Collector cut-off current	I_{CBO}	$V_{CB}=30\text{ V}, I_E=0$		0.1	μA
Collector cut-off current	I_{CEO}	$V_{CE}=20\text{ V}, I_B=0$		0.1	μA
Emitter cut-off current	I_{EBO}	$V_{EB}=5\text{ V}, I_C=0$		0.1	μA
DC current gain	h_{FE}	$V_{CE}=1\text{V}, I_C=100\text{mA}$	90	400	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=700\text{mA}, I_B=70\text{mA}$		0.6	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C=700\text{mA}, I_B=70\text{mA}$		1.2	V
Transition frequency	f_T	$V_{CE}=6\text{V}, I_C=10\text{mA}$ $f = 30\text{MHz}$	50		MHz

CLASSIFICATION OF h_{FE}

Rank	L	
Range	150-300	