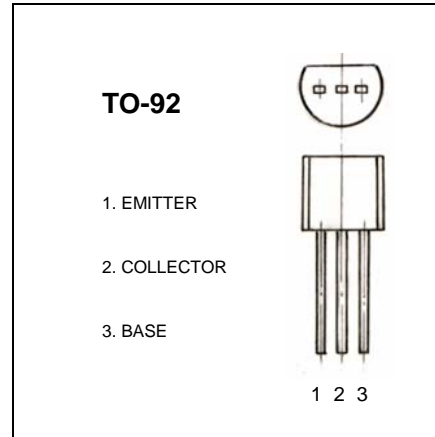




**2SC2001** TRANSISTOR (NPN)

**FEATURES**

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



**MAXIMUM RATINGS**( $T_A=25^{\circ}C$  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	$^{\circ}C$
$T_{stg}$	Storage Temperature	-55-150	$^{\circ}C$

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

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

**CLASSIFICATION OF  $h_{FE}$**

Rank	M	L	K
Range	90-180	135-270	200-400