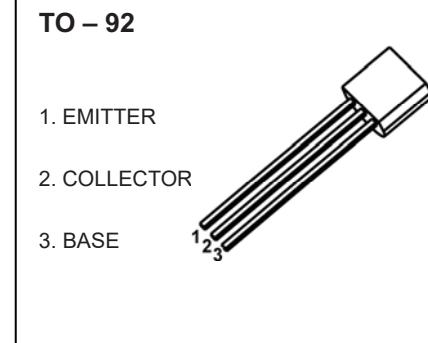


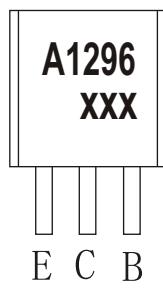
## 2SA1296 TRANSISTOR (PNP)

### FEATURES

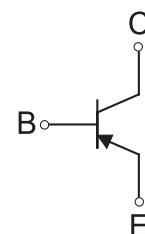
- Low Saturation Voltage:  $V_{CE}(\text{sat})$
- High DC Current Gain



### MARKING



### Equivalent Circuit



### ORDERING INFORMATION

Part Number	Package	Packing Method	Pack Quantity
2SA1296	TO-92	Bulk	1000pcs/Bag

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

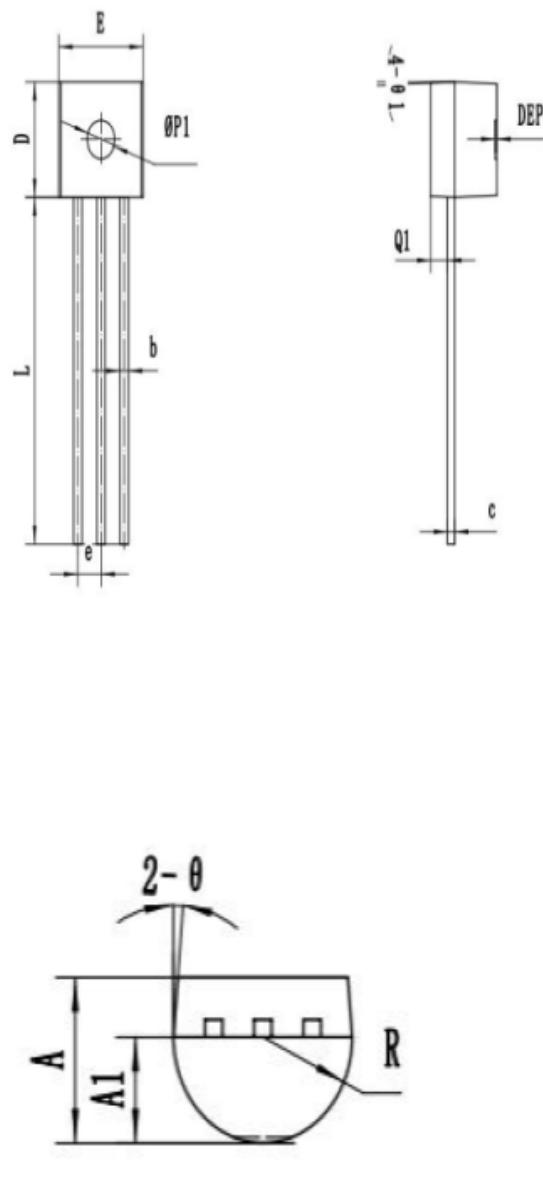
Symbol	Parameter	Value	Unit
$V_{CBO}$	Collector-Base Voltage	-20	V
$V_{CEO}$	Collector-Emitter Voltage	-20	V
$V_{EBO}$	Emitter-Base Voltage	-6	V
$I_c$	Collector Current -Continuous	-2	A
$P_D$	Collector Power Dissipation	750	mW
$R_{KJA}$	Thermal Resistance from Junction to Ambient	166	$^\circ\text{C}/\text{W}$
$T_J, T_{stg}$	Operation Junction and Storage Temperature Range	-55~+150	$^\circ\text{C}$

$T_a=25^\circ\text{C}$  unless otherwise specified

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(\text{BR})\text{CBO}}$	$I_C=-0.1\text{mA}, I_E=0$	-20			V
Collector-emitter breakdown voltage	$V_{(\text{BR})\text{CEO}}$	$I_C=-10\text{mA}, I_B=0$	-20			V
Emitter-base breakdown voltage	$V_{(\text{BR})\text{EBO}}$	$I_E=-0.1\text{mA}, I_C=0$	-6			V
Collector cut-off current	$I_{\text{CBO}}$	$V_{\text{CB}}=-20\text{V}, I_E=0$			-0.1	$\text{mA}$
Emitter cut-off current	$I_{\text{EBO}}$	$V_{\text{EB}}=-6\text{V}, I_C=0$			-0.1	$\text{mA}$
DC current gain	$h_{\text{FE}(1)}$	$V_{\text{CE}}=-2\text{V}, I_C=-0.1\text{A}$	120		400	
	$h_{\text{FE}(2)}$	$V_{\text{CE}}=-2\text{V}, I_C=-2\text{A}$	40			
Collector-emitter saturation voltage	$V_{\text{CE}(\text{sat})}$	$I_C=-2\text{A}, I_B=-0.1\text{A}$			-0.5	V
Base-emitter voltage	$V_{\text{BE}}$	$V_{\text{CE}}=-2\text{V}, I_C=-0.1\text{A}$			-0.85	V
Collector output capacitance	$C_{\text{ob}}$	$V_{\text{CB}}=-10\text{V}, I_E=0, f=1\text{MHz}$		40		pF
Transition frequency	$f_T$	$V_{\text{CE}}=-2\text{V}, I_C=-0.5\text{A}$		120		MHz

**CLASSIFICATION OF  $h_{\text{FE}(1)}$**

RANK	Y	GR
RANGE	120-240	200-400



SYMBOL	MM		
	MIN	NOM	MAX
*A	3.00	3.25	3.50
A1	2.20	2.30	2.40
*b	0.40	0.45	0.50
*c	0.25	0.30	0.35
*D	4.50	4.60	4.70
*E	4.50	4.60	4.70
*e	1.22	1.27	1.32
*L	14.00	14.30	14.60
R	2.20	2.30	2.40
Q1	0.85	0.90	0.95
θ	3°	5°	7°
ØP1	1.40	1.50	1.60
DEP	0.05	0.10	0.20
带*为检验尺寸			