

## TO-92 Plastic-Encapsulated Transistors

### 2SA1296 TRANSISTOR (PNP)

#### FEATURES

Power dissipation

$$P_{CM} : 0.75 \text{ W (Tamb=25°C)}$$

Collector current

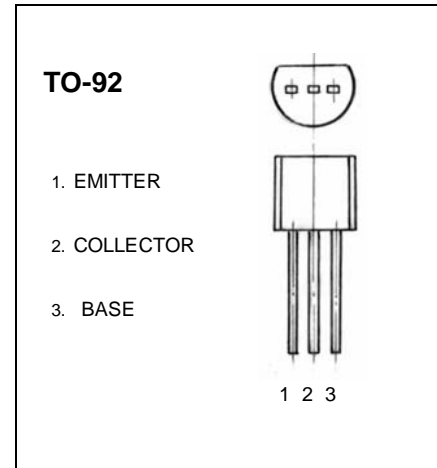
$$I_{CM} : -2 \text{ A}$$

Collector-base voltage

$$V_{(BR)CBO} : -20 \text{ V}$$

Operating and storage junction temperature range

$$T_J, T_{stg}: -55^\circ\text{C to } +150^\circ\text{C}$$



#### ELECTRICAL CHARACTERISTICS (Tamb=25°C unless otherwise specified)

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

#### CLASSIFICATION OF $h_{FE(1)}$

Rank	Y	GR
Range	120-240	200-400
Marking		