

### 2SA1300 TRANSISTOR (PNP)

#### FEATURES

Power dissipation

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

Collector current

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

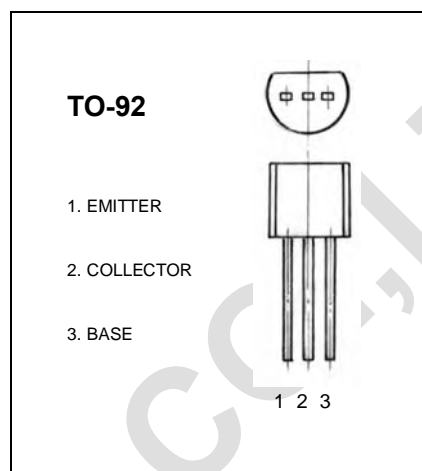
Collector-base voltage

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

Operating and storage junction temperature range

$$T_J : 150^\circ\text{C}$$

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



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

Parameter	Symbol	Test conditions	MIN	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=-1\text{mA}, I_E=0$	-20		V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=-10\text{mA}, I_B=0$	-10		V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=-1\text{mA}, I_C=0$	-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	$h_{FE}$	$V_{CE}=-1\text{V}, I_C=-0.5\text{A}$	140	600	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=-2\text{A}, I_B=-100\text{mA}$		-0.5	V
Base-emitter voltage	$V_{BE}$	$I_C=-2\text{A}, V_{CE}=-1\text{V}$		-1.5	V
Transition frequency	$f_T$	$V_{CE}=-1\text{V}, I_C=-0.5\text{A}$ $f = 30\text{MHz}$	100		MHz

#### CLASSIFICATION OF $h_{FE}$

Rank	Y	GR	BL
Range	140-280	200-400	300-600