



TO-92 Plastic-Encapsulated Transistors

2SA1300 TRANSISTOR (PNP)

FEATURES

Power dissipation

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

Collector current

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

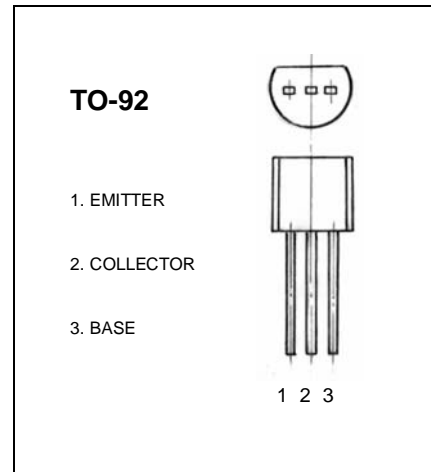
Collector-base voltage

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

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	μA
Emitter cut-off current	I_{EBO}	$V_{EB} = -6 \text{ V}, I_C = 0$		-0.1	μA
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