



## TO-92 Plastic-Encapsulated Transistors

### 2SA950 TRANSISTOR (PNP)

#### FEATURE

Power dissipation

$$P_{CM} : 0.6 \text{ W (Tamb=25°C)}$$

Collector current

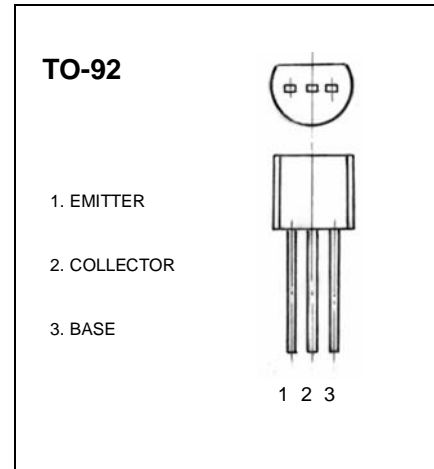
$$I_{CM} : -0.8 \text{ A}$$

Collector-base voltage

$$V_{(BR)CBO} : -35 \text{ V}$$

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	$V_{(BR)CBO}$	$I_C = -1\text{mA}, I_E = 0$	-35			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = -10\text{mA}, I_B = 0$	-30			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E = -1\text{Ma}, I_C = 0$	-5			V
Collector cut-off current	$I_{CBO}$	$V_{CB} = -35\text{V}, I_E = 0$			-0.1	$\mu\text{A}$
Emitter cut-off current	$I_{EBO}$	$V_{EB} = -5\text{V}, I_C = 0$			-0.1	$\mu\text{A}$
DC current gain	$h_{FE(1)}$	$V_{CE} = -1\text{V}, I_C = -100\text{mA}$	100		320	
	$h_{FE(2)}$	$V_{CE} = -1\text{V}, I_C = -700\text{mA}$	35			
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -500\text{mA}, I_B = -20\text{mA}$			-0.7	V
Collector Output Capacitance	Cob	$V_{CB} = -10\text{V}, I_E = 0$ $f = 1\text{MHz}$		19		pF
Transition frequency	$f_T$	$V_{CE} = -5\text{V}, I_C = -10\text{mA},$		120		MHz

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

Rank	O	Y
Range	100-200	160-320