

2SA1318 TRANSISTOR (PNP)**FEATURES**

Power dissipation

$$P_{CM} : 0.5 \text{ W (Tamb=25}^{\circ}\text{C)}$$

Collector current

$$I_{CM} : -0.2 \text{ A}$$

Collector-base voltage

$$V_{(BR)CBO} : -60 \text{ V}$$

Operating and storage junction temperature range

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

TO-92

1. EMITTER
2. COLLECTOR
3. BASE

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

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C = -10\mu\text{A}, I_E = 0$	-60			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = -1\text{mA}, I_B = 0$	-50			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E = -10\mu\text{A}, I_C = 0$	-6			V
Collector cut-off current	I_{CBO}	$V_{CB} = -40\text{V}, I_E = 0$			-0.1	μA
Emitter cut-off current	I_{EBO}	$V_{EB} = -5\text{V}, I_C = 0$			-0.1	μA
DC current gain	$h_{FE(1)}$	$V_{CE} = -6\text{V}, I_C = -1\text{mA}$	100		560	
	$h_{FE(2)}$	$V_{CE} = -6\text{V}, I_C = -0.1\text{mA}$	70			
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -100\text{mA}, I_B = -10\text{mA}$			-0.3	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C = -100\text{mA}, I_B = -10\text{mA}$			-1	V
Transition frequency	f_T	$V_{CE} = -6\text{V}, I_C = -10\text{mA}$		200		MHz
Collector output capacitance	C_{ob}	$V_{CB} = -6\text{V}, I_E = 0, f = 1\text{MHz}$		4.5		pF

CLASSIFICATION OF $h_{FE(1)}$

Rank	R	S	T	U
Range	100-200	140-280	200-400	280-560
Marking				