



TO-92S Plastic-Encapsulated Transistors

2SA1309A TRANSISTOR (PNP)

FEATURES

Power dissipation

$$P_{CM} : 0.3 \text{ W (Tamb=25°C)}$$

Collector current

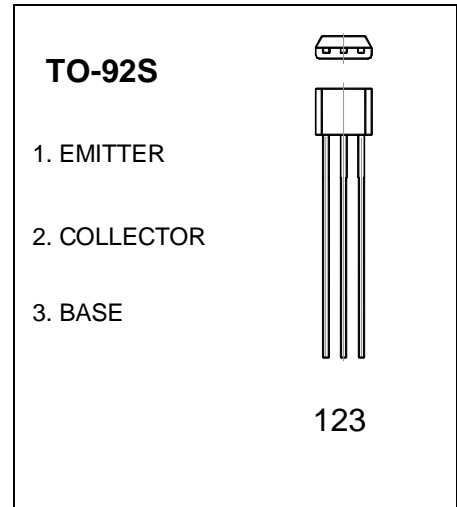
$$I_{CM} : -0.1 \text{ A}$$

Collector-base voltage

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

Operating and storage junction temperature range

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



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

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=-10\mu A, I_E=0$	-60			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=-2mA, I_B=0$	-50			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=-10\mu A, I_C=0$	-7			V
Collector cut-off current	I_{CBO}	$V_{CB}=-10V, I_E=0$			-0.1	μA
Emitter cut-off current	I_{EBO}	$V_{EB}=-10V, I_C=0$			-1	μA
DC current gain	$h_{FE(1)}$	$V_{CE}=-10V, I_C=-2mA$	160		460	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=-50mA, I_B=-5mA$			-0.3	V
Transition frequency	f_T	$V_{CE}=-10V, I_C=-1mA, f=200MHz$		80		MHz
Collector output capacitance	C_{ob}	$V_{CB}=-10V, I_E=0, f=1MHz$		3.5		pF

CLASSIFICATION OF $h_{FE(1)}$

Rank	Q	R	S
Range	160-260	210-340	290-460
Marking			

Typical Characteristics

2SA1309A

