

TO-92 Plastic-Encapsulated Transistors

2SA836 TRANSISTOR (PNP)

FEATURES

Power dissipation

$$P_{CM} : 0.2 \text{ W (Tamb=25°C)}$$

Collector current

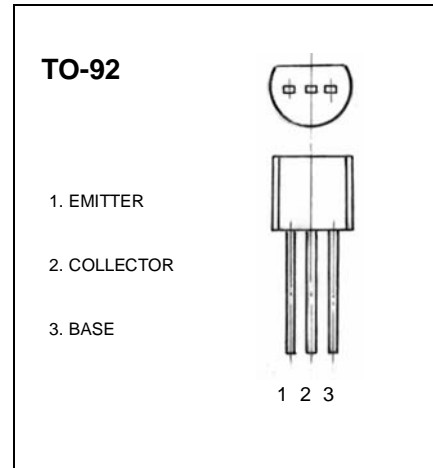
$$I_{CM} : -0.1 \text{ A}$$

Collector-base voltage

$$V_{(BR)CBO} : -55 \text{ V}$$

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	$V_{(BR)CBO}$	$I_C = -10\mu A, I_E = 0$	-55			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = -1 \text{ mA}, I_B = 0$	-55			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E = -10\mu A, I_C = 0$	-5			V
Collector cut-off current	I_{CBO}	$V_{CB} = -18V, I_E = 0$			-0.1	μA
Emitter cut-off current	I_{EBO}	$V_{EB} = -2V, I_C = 0$			-0.05	μA
DC current gain	h_{FE}	$V_{CE} = -12V, I_C = -2mA$	160		500	
Collector-emitter saturation voltage	V_{CEsat}	$I_C = -10mA, I_B = -1mA$			-0.5	V
Base-emitter voltage	$V_{BE(ON)}$	$V_{CE} = -12V, I_C = -2mA$			-0.75	V
Transition frequency	f_T	$V_{CE} = -12V, I_C = -2mA$	150			MHz
Output capacitance	C_{ob}	$V_{CE} = -10V, I_E = 0, f = 1 \text{ MHz}$			4	pF
Noise figure	NF	$V_{CE} = -6V, I_C = 0.1 \text{ mA}, f = 1 \text{ 0Hz}, R_G = 10K\Omega$			5	dB
		$V_{CE} = -6V, I_C = 0.1 \text{ mA}, f = 1 \text{ kHz}, R_G = 10K\Omega$			1	

CLASSIFICATION OF h_{FE}

Rank	C	D
Range	160-320	250-500