

SOT-89 Plastic-Encapsulated Transistors

2SB766 TRANSISTOR (PNP)

FEATURES

Power dissipation

$$P_{CM}: 500 \text{ mW (Tamb=25°C)}$$

Collector current

$$I_{CM}: -1 \text{ A}$$

Collector-base voltage

$$V_{(BR)CBO}: -30 \text{ V}$$

Operating and storage junction temperature range

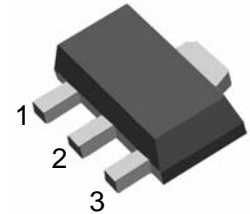
$$T_J, T_{stg}: -55°C \text{ to } +150°C$$

SOT-89

1. BASE

2. COLLECTOR

3. EMITTER



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

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C = -10\mu A, I_E = 0$	-30			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = -2mA, I_B = 0$	-25			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E = -10\mu A, I_C = 0$	-5			V
Collector cut-off current	I_{CBO}	$V_{CB} = -20V, I_E = 0$			-0.1	μA
Emitter cut-off current	I_{EBO}	$V_{EB} = -4V, I_C = 0$			-0.1	μA
DC current gain	$h_{FE(1)}$	$V_{CE} = -10V, I_C = -500mA$	85		340	
	$h_{FE(2)}$	$V_{CE} = -5V, I_C = -1A$	50			
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -500mA, I_B = -50mA$		-0.2	-0.4	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C = -500mA, I_B = -50mA$		-0.85	-1.2	V
Transition frequency	f_T	$V_{CE} = -10V, I_C = -50mA, f = 200MHz$		200		MHz
Collector output capacitance	C_{ob}	$V_{CB} = -10V, I_E = 0, f = 1MHz$		20	30	pF

CLASSIFICATION OF $h_{FE(1)}$

Rank	Q	R	S
Range	85-170	120-240	170-340
Marking	AQ	AR	AS