



## SOT-89 Plastic-Encapsulate Transistors

### **B772** TRANSISTOR (PNP)

#### FEATURES

Power dissipation

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

Collector current

$$I_{CM}: -3 \text{ A}$$

Collector-base voltage

$$V_{(BR)CBO}: -40 \text{ V}$$

Operating and storage junction temperature range

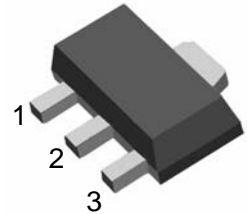
$$T_J, T_{stg}: -55^{\circ}\text{C to } +150^{\circ}\text{C}$$

#### SOT-89

1. BASE

2. COLLECTOR

3. EMITTER



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

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

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C = -100\mu\text{A}, I_E = 0$	-40			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = -10 \text{ mA}, I_B = 0$	-30			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E = -100 \mu\text{A}, I_C = 0$	-6			V
Collector cut-off current	$I_{CBO}$	$V_{CB} = -40 \text{ V}, I_E = 0$			-1	$\mu\text{A}$
Collector cut-off current	$I_{CEO}$	$V_{CE} = -30 \text{ V}, I_B = 0$			-10	$\mu\text{A}$
Emitter cut-off current	$I_{EBO}$	$V_{EB} = -6 \text{ V}, I_C = 0$			-1	$\mu\text{A}$
DC current gain	$h_{FE(1)}$	$V_{CE} = -2 \text{ V}, I_C = -1 \text{ A}$	60		400	
	$h_{FE(2)}$	$V_{CE} = -2 \text{ V}, I_C = -100 \text{ mA}$	32			
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -2 \text{ A}, I_B = -0.2 \text{ A}$			-0.5	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C = -2 \text{ A}, I_B = -0.2 \text{ A}$			-1.5	V
Transition frequency	$f_T$	$V_{CE} = -5 \text{ V}, I_C = -0.1 \text{ A}$ $f = 10 \text{ MHz}$	50			MHz

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

Rank	R	O	Y	GR
Range	60-120	100-200	160-320	200-400