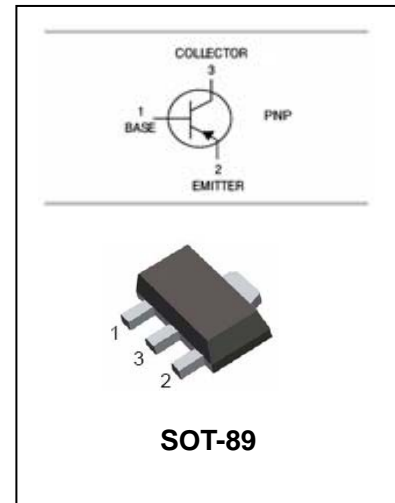


# PNP Silicon Epitaxial Planar Transistor

# B772

## FEATURES

- Low speed switching.
- Low saturation voltage.
- Excellent  $h_{FE}$  linearity and high  $h_{FE}$ .
- Complementary: D882.



## APPLICATIONS

- Audio frequency power amplifier.

## ORDERING INFORMATION

Type No.	Marking	Package Code
B772	B772	SOT-89

## MAXIMUM RATING @ Ta=25°C unless otherwise specified

Symbol	Parameter	Value	Units
$V_{CBO}$	Collector-Base Voltage	-40	V
$V_{CEO}$	Collector-Emitter Voltage	-30	V
$V_{EBO}$	Emitter-Base Voltage	-5	V
$I_C$	Collector Current -Continuous	-3	A
$P_C$	Collector Dissipation	500	mW
$T_j, T_{stg}$	Junction and Storage Temperature	-55 to +150	°C

**PNP Silicon Epitaxial Planar Transistor**
**B772**
**ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified**

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C = -100\mu A, I_E = 0$	-40			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = -10mA, I_B = 0$	-30			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E = -100\mu A, I_C = 0$	-6			V
Collector cut-off current	$I_{CBO}$	$V_{CB} = -40V, I_B = 0$			-1	$\mu A$
Collector cut-off current	$I_{CEO}$	$V_{CB} = -30V, I_E = 0$			-1	$\mu A$
Emitter cut-off current	$I_{EBO}$	$V_{EB} = -6V, I_C = 0$			-1	$\mu A$
DC current gain	$h_{FE}$	$V_{CE} = -2V, I_C = -1A$ $V_{CE} = -2V, I_C = -20mA$	60 30	160 220	400	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -2A, I_B = -0.2A$		-0.3	-0.5	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C = -2A, I_B = -0.2A$		-1.0	-2.0	V
Transition frequency	$f_T$	$V_{CE} = -5V, I_C = -0.1A$		80		MHz
Collector output capacitance	$C_{ob}$	$V_{CB} = -10V, I_E = 0, f = 1MHz$		55		pF

**CLASSIFICATION OF  $h_{FE}$** 

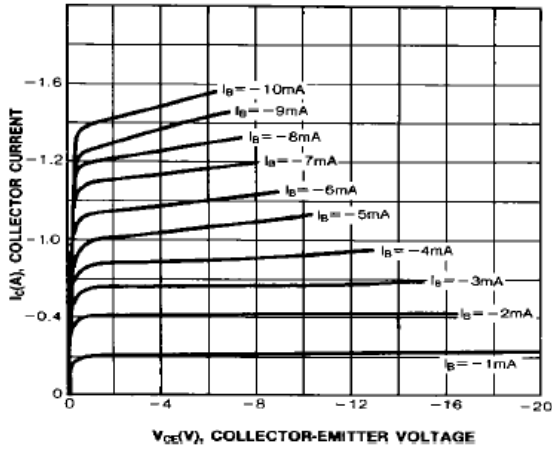
Rank	R	O	Y	G
Range	60-120	100-200	160-320	200-400

PNP Silicon Epitaxial Planar Transistor

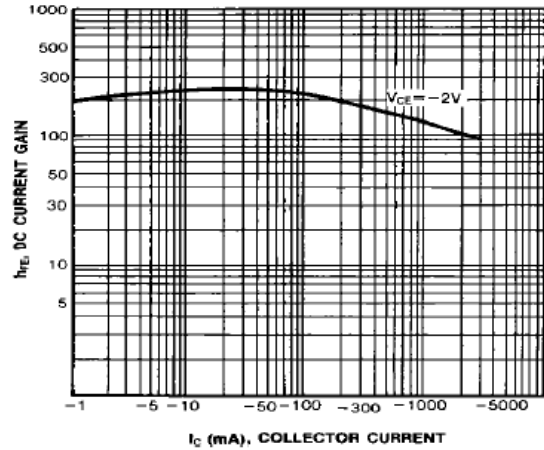
**B772**

TYPICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

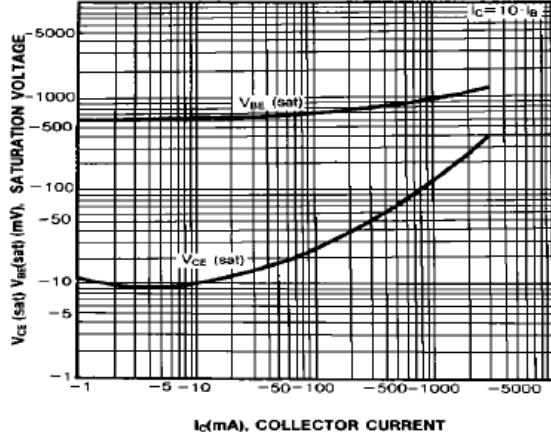
STATIC CHARACTERISTIC



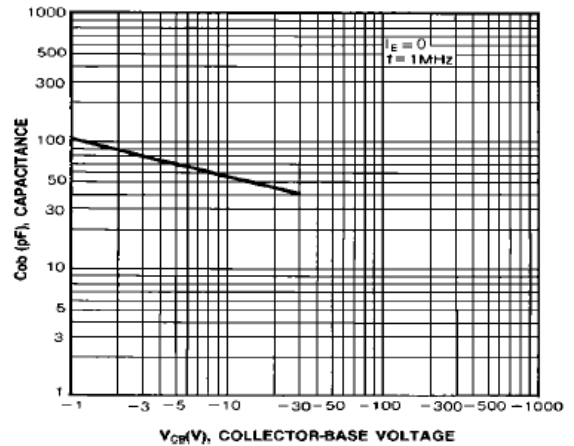
DC CURRENT GAIN



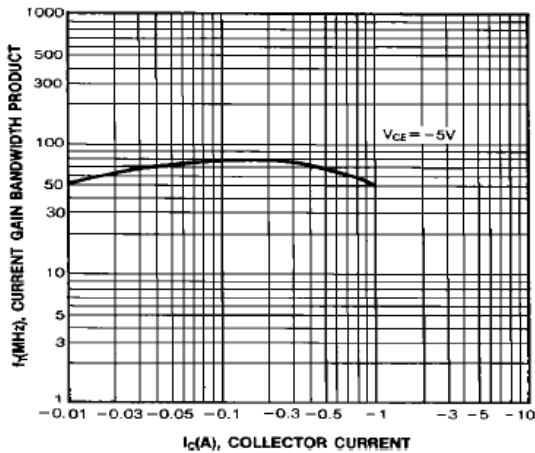
BASE-EMITTER SATURATION VOLTAGE  
COLLECTOR-EMITTER SATURATION VOLTAGE



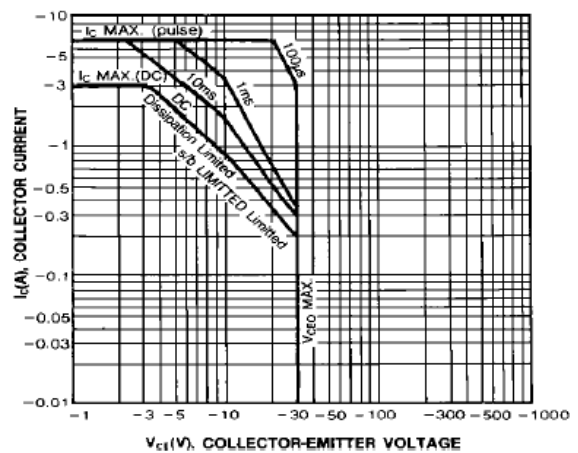
COLLECTOR OUTPUT CAPACITANCE



CURRENT GAIN-BANDWIDTH PRODUCT



SAFE OPERATING AREA



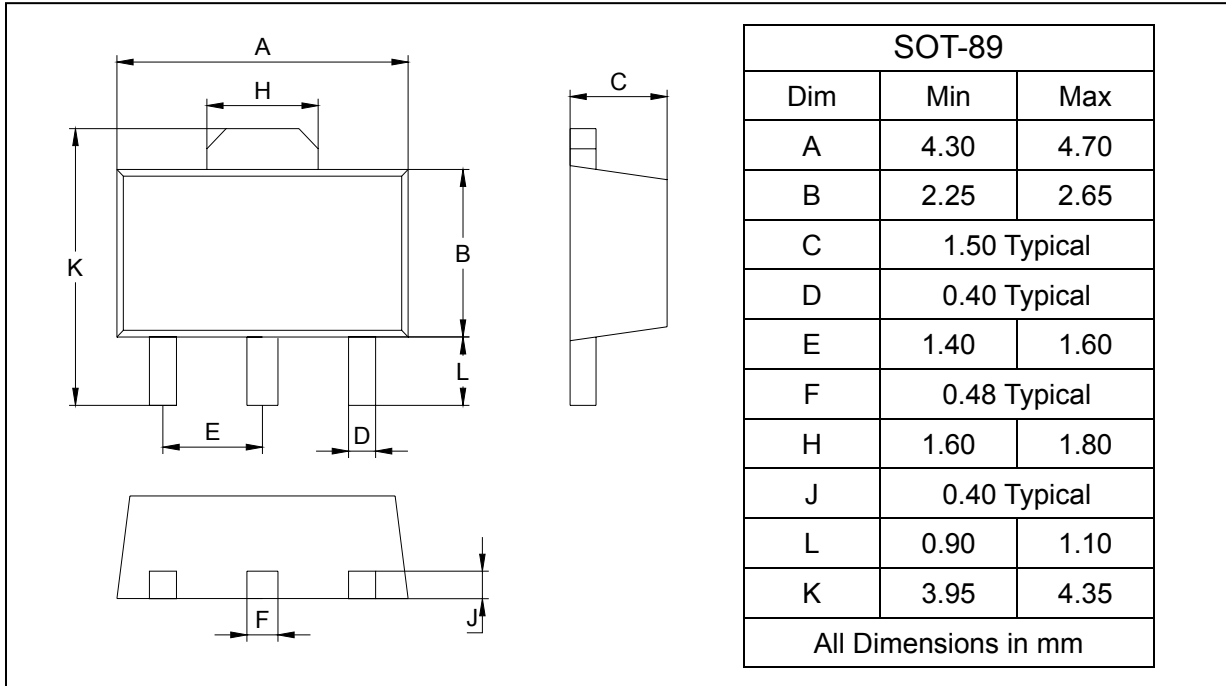
**PNP Silicon Epitaxial Planar Transistor**

**B772**

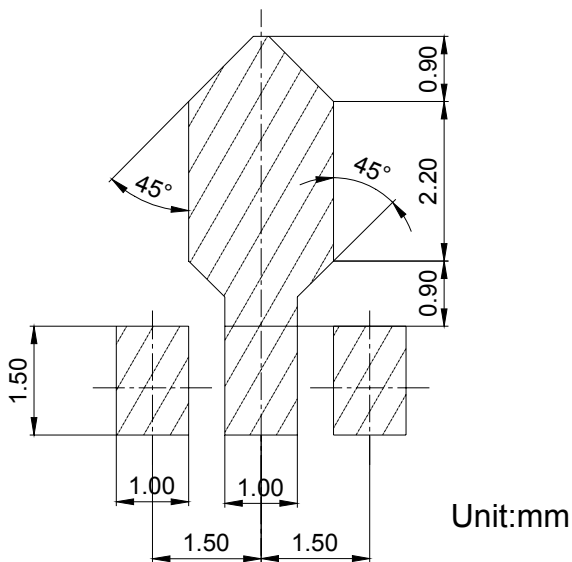
**PACKAGE OUTLINE**

Plastic surface mounted package

SOT-89



**SOLDERING FOOTPRINT**



**PACKAGE INFORMATION**

Device	Package	Shipping
B772	SOT-89	1000/Tape&Reel