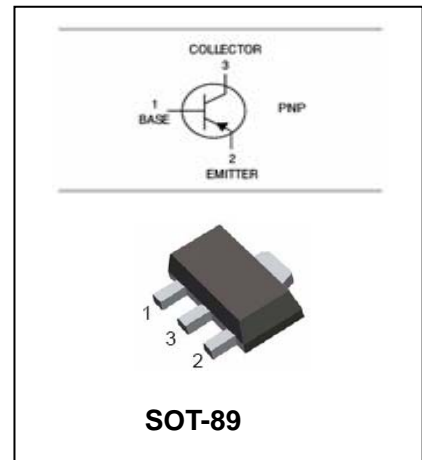


## Silicon PNP epitaxial planer transistor

## 2SB766A

### FEATURES

- Large collector power dissipation  $P_c$ .
- Complementary to 2SD874A.
- Mini Power type package, allowing downsizing of the equipment and automatic insertion through the tape packing and the magazine packing.



### ORDERING INFORMATION

Type No.	Marking	Package Code
2SB766A□	BQ/BR/BS	SOT-89

□: none is for Lead Free package;

“G” is for Halogen Free package.

### MAXIMUM RATING @ $T_a=25^{\circ}\text{C}$ unless otherwise specified

Symbol	Parameter	Value	Unit
$V_{CBO}$	Collector-Base voltage	-60	V
$V_{CEO}$	Collector-Emitter voltage	-50	V
$V_{EBO}$	Emitter-Base voltage	-5	V
$I_C$	Collector current	-1	A
$I_{CP}$	Peak collector current	-1.5	A
$P_C$	Collector power dissipation	1	W
$T_j, T_{stg}$	Junction and storage temperature	-55 to +150	$^{\circ}\text{C}$

## Silicon PNP epitaxial planer transistor

## 2SB766A

### ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C = -10\mu A$ $I_E = 0$	-60			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = -2mA$ $I_B = 0$	-50			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E = -10\mu A$ $I_C = 0$	-5			V
Collector cut-off current	$I_{CBO}$	$V_{CB} = -20V$ $I_E = 0$			-0.1	$\mu A$
DC current gain	$h_{FE}$	$V_{CE} = -10V$ $I_C = -500mA$	85		340	
		$V_{CE} = -5V$ $I_C = -1A$	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	$C_{obo}$	$V_{CB} = -10V$ $f = 1.0MHz$ $I_E = 0$		20	30	pF

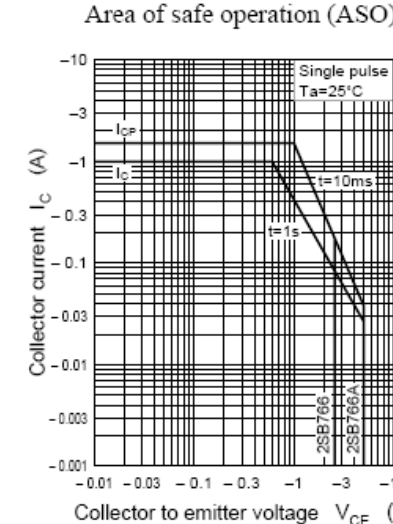
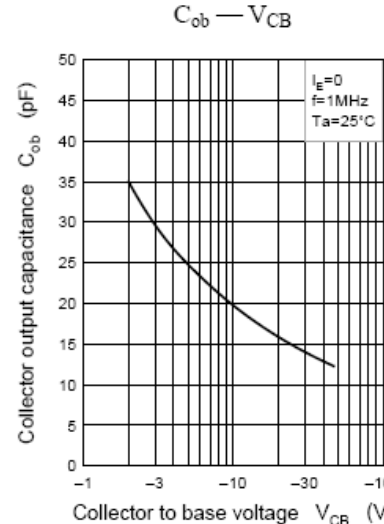
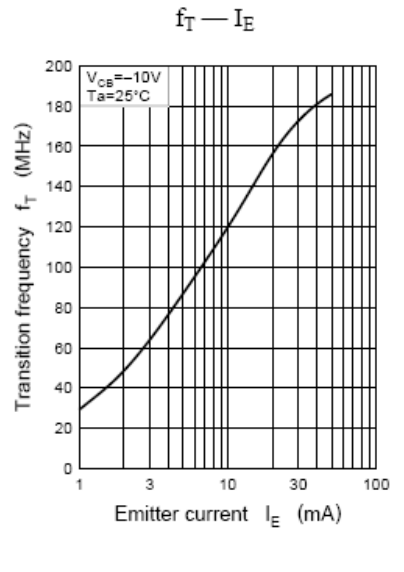
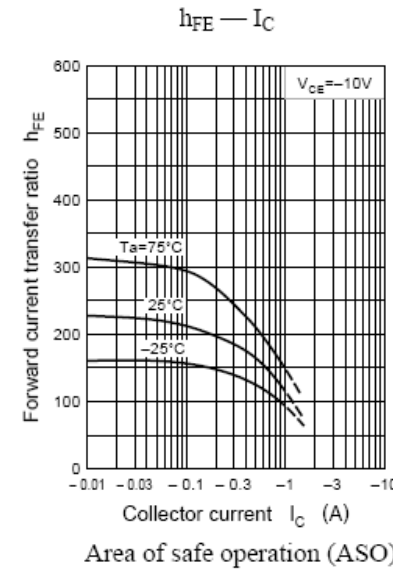
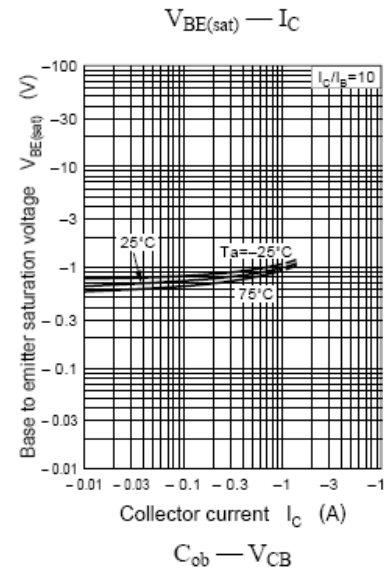
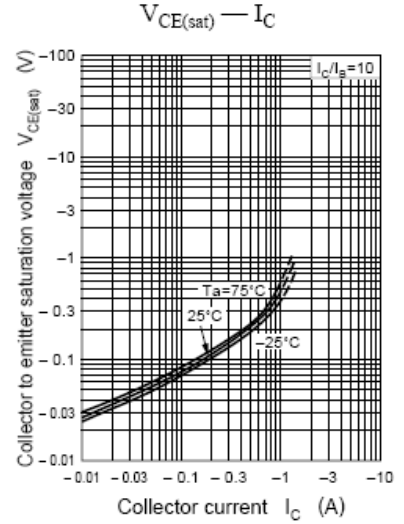
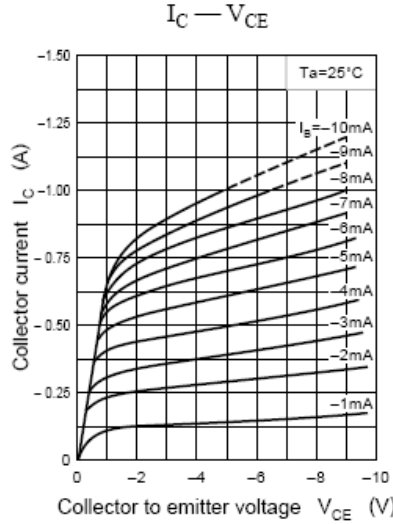
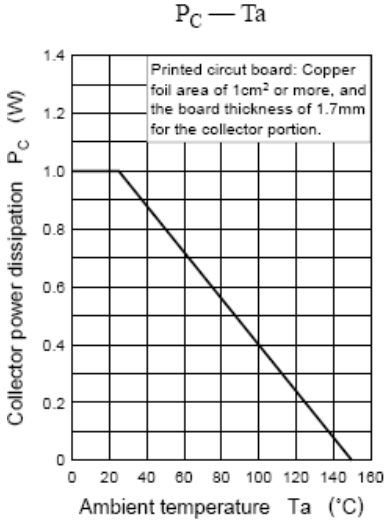
### CLASSIFICATION $H_{FE}$

Rank	Q	R	S
Range	85-170	120-240	170-340
Marking	BQ	BR	BS

**Silicon PNP epitaxial planer transistor**

**2SB766A**

TYPICAL CHARACTERISTICS @  $T_a=25^\circ\text{C}$  unless otherwise specified



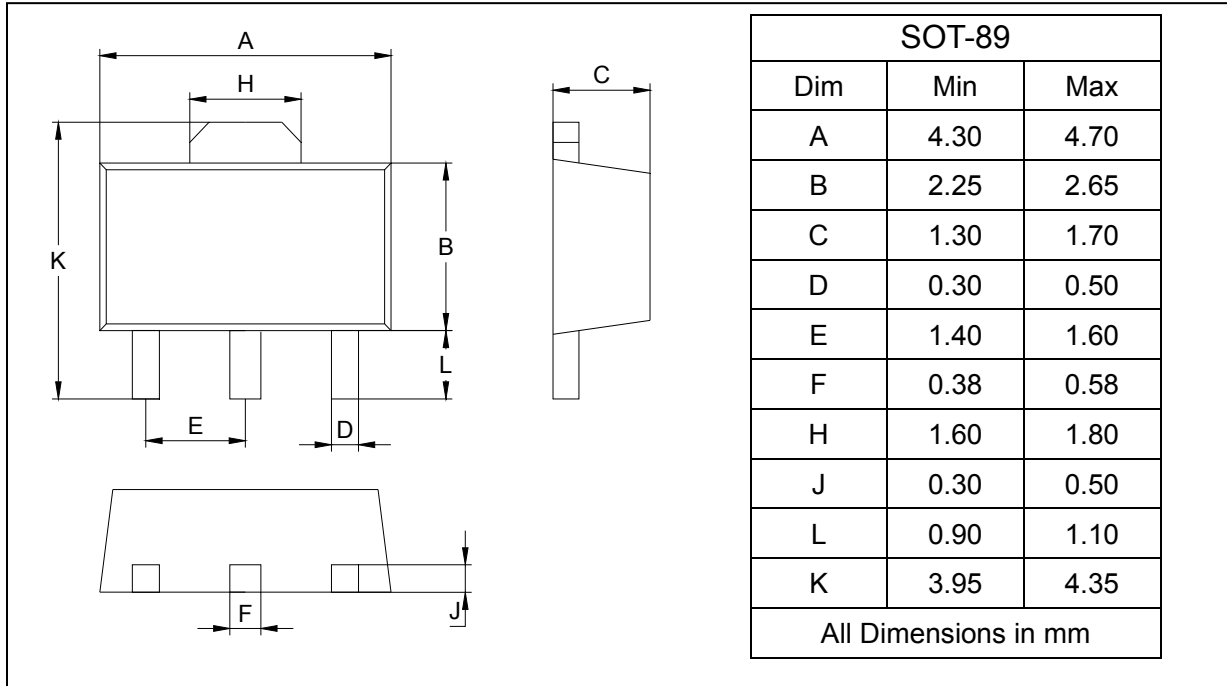
## Silicon PNP epitaxial planer transistor

**2SB766A**

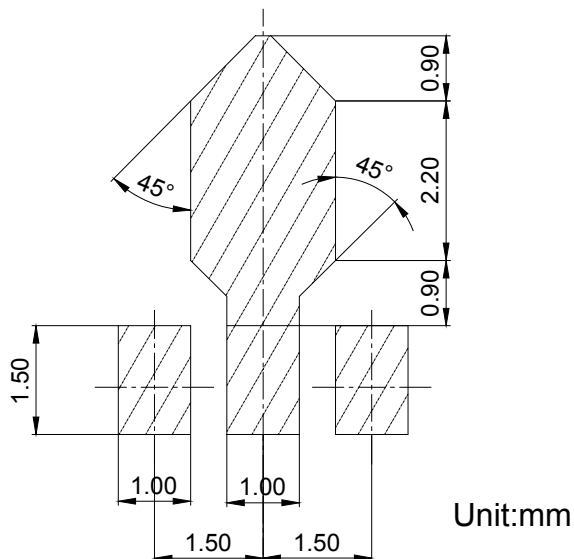
### PACKAGE OUTLINE

Plastic surface mounted package

SOT-89



### SOLDERING FOOTPRINT



### PACKAGE INFORMATION

Device	Package	Shipping
2SB766A	SOT-89	1000/Tape&Reel