

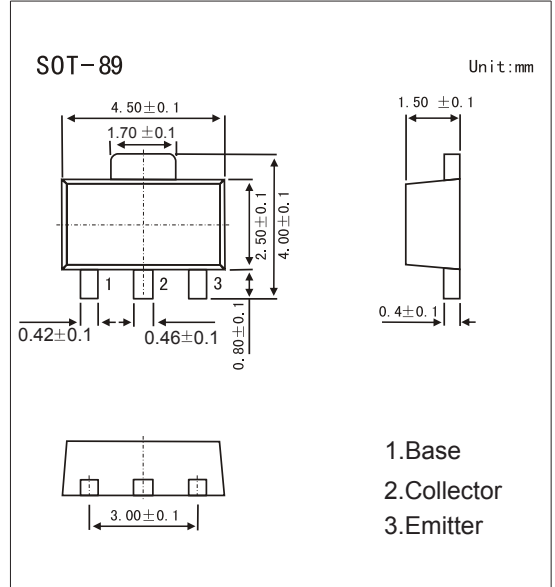
## SOT-89 Plastic-Encapsulate Transistors

### Features

- Large collector power dissipation PC
- Complimentary to 2SD874.
- PNP Transistors

### MECHANICAL DATA

- Case style: SOT-89 molded plastic
- Mounting position: any



## MAXIMUM RATINGS AND CHARACTERISTICS

@ 25°C Ambient Temperature (unless otherwise noted)

Parameter	Symbol	Rating	Unit
Collector - Base Voltage	$V_{CBO}$	-30	V
Collector - Emitter Voltage	$V_{CEO}$	-25	
Emitter - Base Voltage	$V_{EBO}$	-5	
Collector Current - Continuous	$I_C$	-1	A
Collector Current - Pulse	$I_{CP}$	-1.5	
Collector Power Dissipation	$P_C$	1	W
Junction Temperature	$T_J$	150	°C
Storage Temperature range	$T_{stg}$	-55 to 150	

### PACKAGE INFORMATION

Device	Package	Shipping
2SB766	SOT-89	1000/Tape&Reel

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector- base breakdown voltage	$V_{CBO}$	$I_C = -100 \mu A, I_E = 0$	-30			V
Collector- emitter breakdown voltage	$V_{CEO}$	$I_C = -2 mA, I_B = 0$	-25			
Emitter - base breakdown voltage	$V_{EBO}$	$I_E = -100 \mu A, I_C = 0$	-5			
Collector-base cut-off current	$I_{CBO}$	$V_{CB} = -20 V, I_E = 0$			-100	nA
Emitter cut-off current	$I_{EBO}$	$V_{EB} = -4V, I_C = 0$			-100	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -500 mA, I_B = -50mA$		-0.2	-0.4	V
Base - emitter saturation voltage	$V_{BE(sat)}$	$I_C = -500 mA, I_B = -50mA$		-0.85	-1.2	
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 output capacitance	$C_{ob}$	$V_{CB} = -10V, I_E = 0, f = 1MHz$		20	30	pF
Transition frequency	$f_T$	$V_{CE} = -10V, I_C = -50mA, f = 200MHz$		200		MHz

### Classification of $h_{FE(1)}$

Type	2SB766-Q	2SB766-R	2SB766-S
Range	85-170	120-240	170-340
Marking	AQ	AR	AS

# RATINGS AND CHARACTERISTIC CURVES

## ■ Typical Characteristics

