

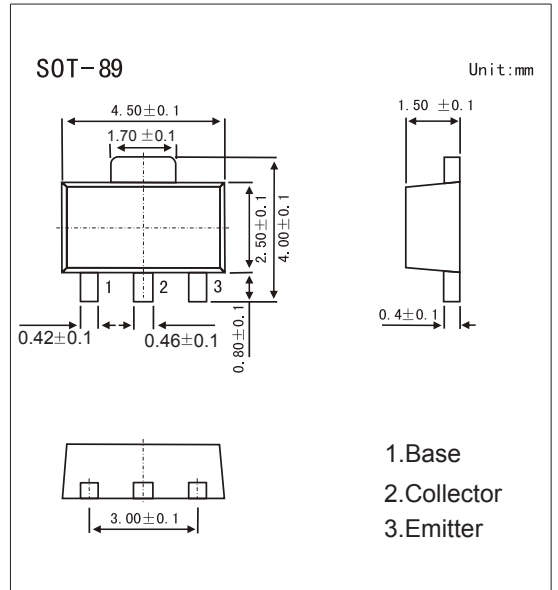
SOT-89 Plastic-Encapsulate Transistors

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_{CB0}	-30	V
Collector - Emitter Voltage	V_{CE0}	-25	
Emitter - Base Voltage	V_{EB0}	-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_{CB0}	$I_C = -100 \mu A, I_E = 0$	-30			V
Collector- emitter breakdown voltage	V_{CE0}	$I_C = -2 mA, I_B = 0$	-25			
Emitter - base breakdown voltage	V_{EB0}	$I_E = -100 \mu A, I_C = 0$	-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

