

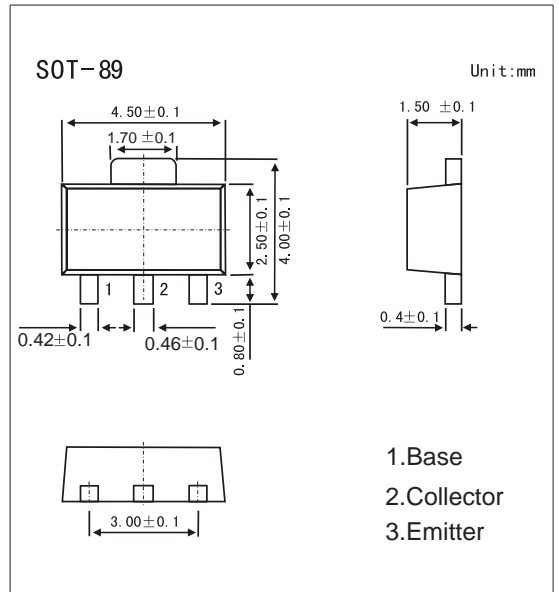
## SOT-89 Plastic-Encapsulate Transistors

### Features

- Suitable For Output Stage of 3 Watts
- Amplifier Small Flat Package
- $P_c = 1$  to 2W (mounted on ceramic substrate)
- Complementary to 2SC2883
- 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	$V_{CE0}$	-30	V
Emitter-Base Voltage	$V_{EB0}$	-5	V
Collector Current	$I_c$	-1.5	A
Base Current	$I_B$	-0.3	A
Collector Power Dissipation	$P_c$	500	mW
	$P_{c^*}$	1000	
Junction temperature	$T_j$	150	°C
Storage temperature Range	$T_{stg}$	-55 to +150	°C

\* Mounted on ceramic substrate (250 mm<sup>2</sup> x 0.8 t)

### PACKAGE INFORMATION

Device	Package	Shipping
2SA1201	SOT-89	1000/Tape&Reel

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector- base breakdown voltage	$V_{CB0}$	$I_c = -1$ mA, $I_E = 0$	-30			V
Collector- emitter breakdown voltage	$V_{CE0}$	$I_c = -10$ mA, $I_B = 0$	-30			
Emitter - base breakdown voltage	$V_{EB0}$	$I_E = -1$ mA, $I_c = 0$	-5			
Collector-base cut-off current	$I_{CB0}$	$V_{CB} = -30$ V, $I_E = 0$			-100	nA
Emitter cut-off current	$I_{EB0}$	$V_{EB} = -5$ V, $I_c = 0$			-100	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_c = -1.5$ A, $I_B = -30$ mA			-2.0	V
Base - emitter saturation voltage	$V_{BE(sat)}$	$I_c = -1.5$ A, $I_B = -30$ mA			-1.2	
Base - emitter voltage	$V_{BE}$	$V_{CE} = -2$ V, $I_c = -500$ mA			-1	
DC current gain	$h_{FE}$	$V_{CE} = -2$ V, $I_c = -500$ mA	100		320	
Output capacitance	$C_{ob}$	$V_{CE} = -10$ V, $I_E = 0$ , $f = 1$ MHz			50	pF
Transition frequency	$f_T$	$V_{CE} = -2$ V, $I_E = -500$ mA		120		MHz

### Classification of $h_{FE}$

Type	2SA1203-O	2SA1203-Y
Range	100-200	160-320
Marking	HO	HY

# RATINGS AND CHARACTERISTIC CURVES

## ■ Typical Characteristics

