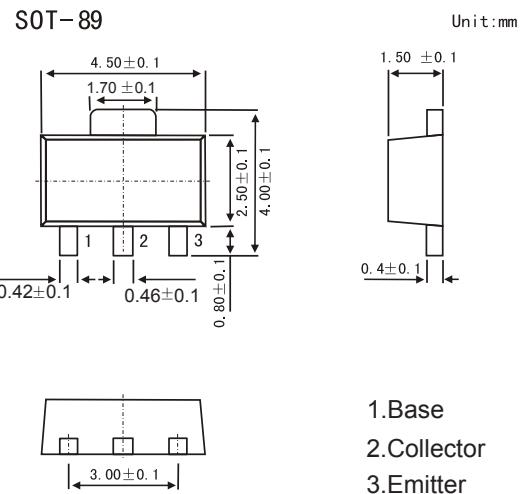


**SOT-89 Plastic-Encapsulate Transistors**
**Features**

- Small Flat Package
- High Current Application
- High Transition Frequency
- PNP Transistors

**MECHANICAL DATA**

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


**MAXIMUM RATINGS AND CHARACTERISTICS**

@ 25°C Ambient Temperature (unless otherwise noted)

Parameter	Symbol	Rating	Unit
Collector - Base Voltage	V <sub>CBO</sub>	-35	V
Collector - Emitter Voltage	V <sub>C EO</sub>	-30	
Emitter - Base Voltage	V <sub>EBO</sub>	-5	
Collector Current - Continuous	I <sub>C</sub>	-800	mA
Collector Power Dissipation	P <sub>C</sub>	500	mW
Thermal Resistance From Junction to Ambient	R <sub>θJA</sub>	250	°C/W
Junction Temperature	T <sub>J</sub>	150	°C
Storage Temperature range	T <sub>stg</sub>	-55 to 150	

PACKAGE INFORMATION		
Device	Package	Shipping
2SA1664	SOT-89	1000/Tape&Reel

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector- base breakdown voltage	V <sub>CBO</sub>	I <sub>C</sub> = -1mA, I <sub>E</sub> =0	-35			V
Collector- emitter breakdown voltage	V <sub>C EO</sub>	I <sub>C</sub> = -10 mA, I <sub>B</sub> =0	-30			
Emitter - base breakdown voltage	V <sub>EBO</sub>	I <sub>E</sub> = -1mA, I <sub>C</sub> =0	-5			
Collector-base cut-off current	I <sub>CBO</sub>	V <sub>CB</sub> = -35 V , I <sub>E</sub> =0			-0.1	uA
Emitter cut-off current	I <sub>EBO</sub>	V <sub>EB</sub> = -5V , I <sub>C</sub> =0			-0.1	
Collector-emitter saturation voltage	V <sub>C E(sat)</sub>	I <sub>C</sub> =-500 mA, I <sub>B</sub> =-20 mA			-0.7	V
Base - emitter saturation voltage	V <sub>BE(sat)</sub>	I <sub>C</sub> =-500 mA, I <sub>B</sub> =-20 mA			-1.2	
Base - emitter voltage	V <sub>BE</sub>	V <sub>C E</sub> = -1V, I <sub>C</sub> = -10mA	-0.5		-0.8	
DC current gain	h <sub>FE(1)</sub>	V <sub>C E</sub> = -1V, I <sub>C</sub> = -100mA	100		320	
	h <sub>FE(2)</sub>	V <sub>C E</sub> = -1V, I <sub>C</sub> = -700mA	35			
Collector output capacitance	C <sub>ob</sub>	V <sub>CB</sub> = -10V,I <sub>E</sub> =0, f=1MHz		19		pF
Transition frequency	f <sub>T</sub>	V <sub>C E</sub> = -5V, I <sub>C</sub> = -10mA		120		MHz

**Classification of h<sub>FE(1)</sub>**

Type	2SA1664-O	2SA1664-Y
Range	100-200	160-320
Marking	RO	RY