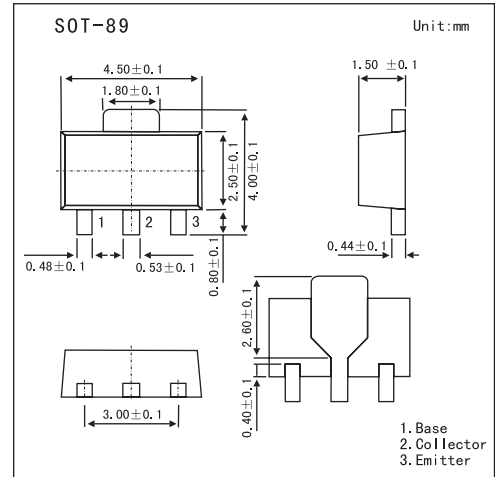


## PNP Transistor

### 2SA1664

#### ■ Features

- Collector current  $I_c = -0.8A$
- Power dissipation  $P_c = 0.5W$



#### ■ Absolute Maximum Ratings $T_a = 25^\circ C$

Parameter	Symbol	Rating	Unit
Collector-base voltage	$V_{CB0}$	-35	V
Collector-emitter voltage	$V_{CE0}$	-30	V
Emitter-base voltage	$V_{EB0}$	-5	V
Collector current	$I_c$	-0.8	A
Collector power dissipation	$P_c$	0.5	W
Junction temperature	$T_j$	150	$^\circ C$
Storage temperature	$T_{stg}$	-55 to +150	$^\circ C$

#### ■ Electrical Characteristics $T_a = 25^\circ C$

Parameter	Symbol	Testconditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{CB0}$	$I_c = -1mA, I_E = 0$	-35			V
Collector-emitter breakdown voltage	$V_{CE0}$	$I_c = -10mA, I_B = 0$	-30			V
Emitter-base breakdown voltage	$V_{EB0}$	$I_E = -1mA, I_c = 0$	-5			V
Collector-base cutoff current	$I_{CB0}$	$V_{CB} = -35V, I_E = 0$			-0.1	$\mu A$
Emitter cutoff current	$I_{EB0}$	$V_{EB} = -5V, I_c = 0$			-0.1	$\mu A$
DC current gain	$h_{FE}$	$V_{CE} = -1V, I_c = -100mA$	100		320	
		$V_{CE} = -1V, I_c = -700mA$	35			
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_c = -500mA, I_B = -20mA$			-0.7	V
Base emitter voltage	$V_{BE}$	$V_{CE} = -1V, I_c = -10mA$	-0.5		-0.8	V
Collector output capacitance	$C_{ob}$	$V_{CB} = -10V, I_E = 0, f = 1MHz$		120		MHz
Transition frequency	$f_T$	$V_{CE} = -5V, I_c = -10mA$		19		pF

#### ■ $h_{FE}$ Classification

Marking	RO	RY
Rank	O	Y
$h_{FE}$	100~200	160~320