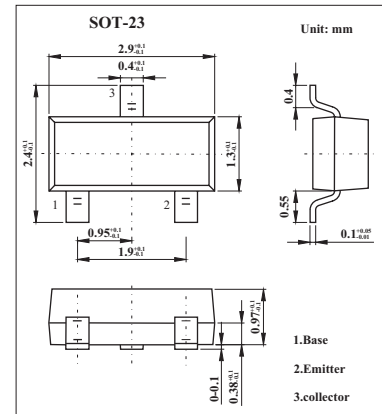


Silicon PNP Epitaxial Planar Type

2SC2405

■ Features

- Low noise voltage NV.
- High forward current transfer ratio hFE.
- Mini type package, allowing downsizing of the equipment and automatic insertion through the tape packing and the magazine packing.

■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

Parameter	Symbol	Rating	Unit
Collector-base voltage	V_{CBO}	35	V
Collector-emitter voltage	V_{CEO}	35	V
Emitter-base voltage	V_{EBO}	5	V
Collector current	I_C	50	mA
Peak collector current	I_{CP}	100	mA
Collector power dissipation	P_C	200	mW
Junction temperature	T_j	150	$^\circ\text{C}$
Storage temperature	T_{stg}	-55 to +150	$^\circ\text{C}$

■ Electrical Characteristics $T_a = 25^\circ\text{C}$

Parameter	Symbol	Testconditions	Min	Typ	Max	Unit
Collector-base voltage	V_{CBO}	$I_C = 10 \mu\text{A}, I_E = 0$	35			V
Collector-emitter voltage	V_{CEO}	$I_C = 2 \text{ mA}, I_B = 0$	35			V
Emitter-base voltage	V_{EBO}	$I_E = 10 \mu\text{A}, I_C = 0$	5			V
Base-emitter voltage	V_{BE}	$V_{CE} = 1 \text{ V}, I_C = 100 \text{ mA}$		0.7	1.0	V
Collector-base cutoff current	I_{CBO}	$V_{CB} = 10 \text{ V}, I_E = 0$			0.1	μA
Collector-emitter cutoff current	I_{CEO}	$V_{CE} = 10 \text{ V}, I_B = 0$			1	μA
Forward current transfer ratio	hFE	$V_{CE} = 5 \text{ V}, I_C = 2 \text{ mA}$	180		700	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = 100 \text{ mA}, I_B = -10 \text{ mA}$			0.6	V
Transition frequency	f_T	$V_{CB} = 5 \text{ V}, I_E = -2 \text{ mA}, f = 200 \text{ MHz}$		200		MHz
Noise voltage	NV	$V_{CE} = 10 \text{ V}, I_C = 1 \text{ mA}, G_v = 80 \text{ dB}$ $R_g = 100 \text{ k}\Omega, F_{\text{function}} = \text{FLAT}$		110		mV

■ hFE Classification

Marking	SR	SS	ST
hFE	180~360	260~520	360~700