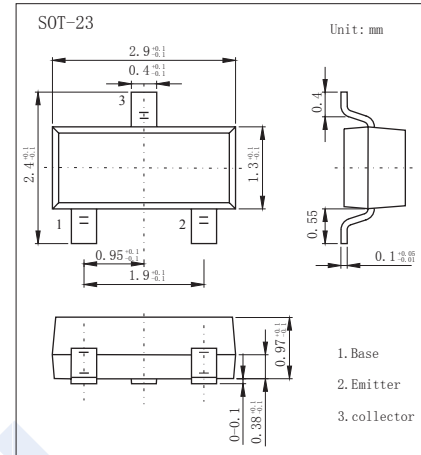


NPN Transistors

2SC2405

■ Features

- Collector Current Capability $I_c=50\text{mA}$
- Collector Emitter Voltage $V_{CE0}=35\text{V}$
- Complementary to 2SA1034

■ 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	
Emitter - Base Voltage	V_{EBO}	5	
Collector Current - Continuous	I_c	50	mA
Collector Current - Pulse	I_{CP}	100	
Collector Power Dissipation	P_c	200	mW
Junction Temperature	T_J	150	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	-55 to 150	

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

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector- base breakdown voltage	V_{CBO}	$I_c = 100 \mu\text{A}$, $I_E = 0$	35			V
Collector- emitter breakdown voltage	V_{CEO}	$I_c = 2\text{mA}$, $I_B = 0$	35			
Emitter - base breakdown voltage	V_{EBO}	$I_E = 100 \mu\text{A}$, $I_c = 0$	5			
Collector-base cut-off current	I_{CBO}	$V_{CB} = 35\text{V}$, $I_E = 0$			0.1	μA
Collector-emitter cut-off current	I_{CEO}	$V_{CE} = 10\text{V}$, $I_B = 0$			1	
Emitter cut-off current	I_{EBO}	$V_{EB} = 5\text{V}$, $I_c = 0$			0.1	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_c = 100\text{mA}$, $I_B = 10\text{mA}$			0.6	V
Base - emitter saturation voltage	$V_{BE(sat)}$	$I_c = 100\text{mA}$, $I_B = 10\text{mA}$			1.2	
Base - emitter voltage	V_{BE}	$V_{CE} = 1\text{V}$, $I_c = 100\text{mA}$			1	
DC current gain	h_{FE}	$V_{CE} = 5\text{V}$, $I_E = -2\text{mA}$	180		700	
Noise voltage	NV	$V_{CE} = 10\text{V}$, $I_c = 1\text{mA}$, $G_v = 80\text{dB}$ $R_g = 100\text{k}\Omega$, Function = FLAT		110		mV
Transition frequency	f_T	$V_{CB} = 5\text{V}$, $I_E = -2\text{mA}$, $f = 200\text{MHz}$		200		MHz

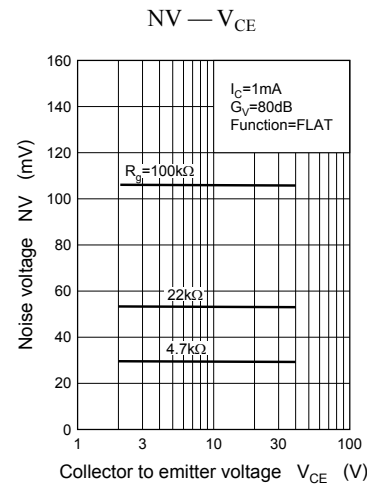
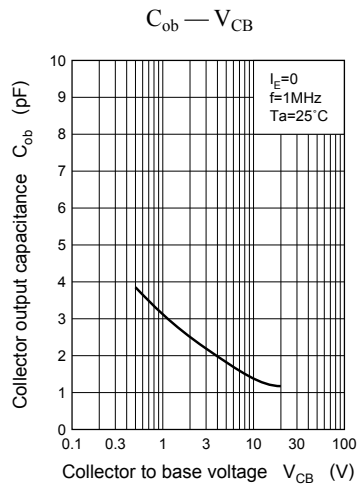
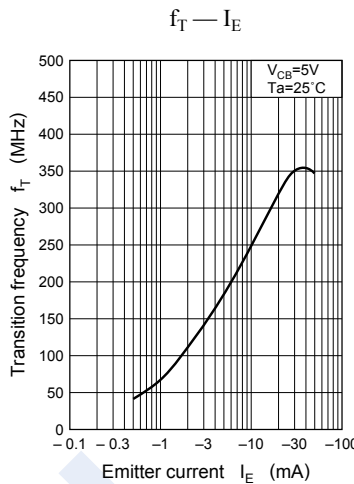
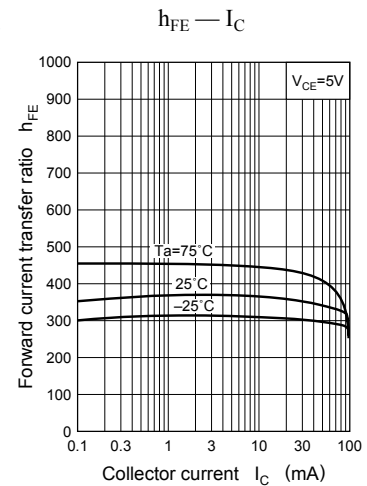
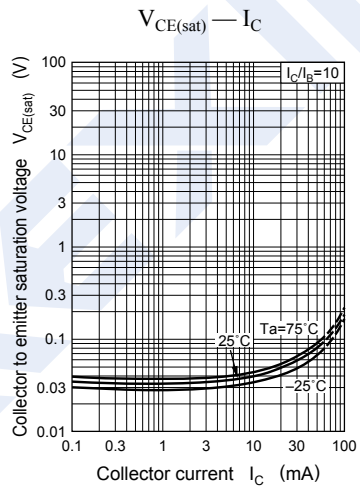
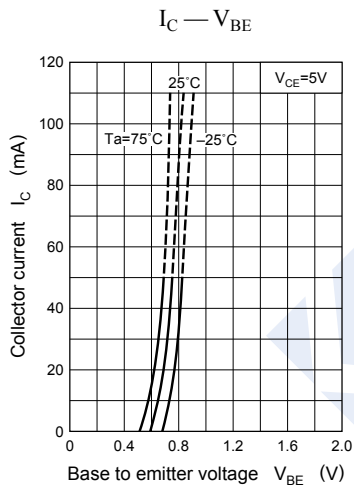
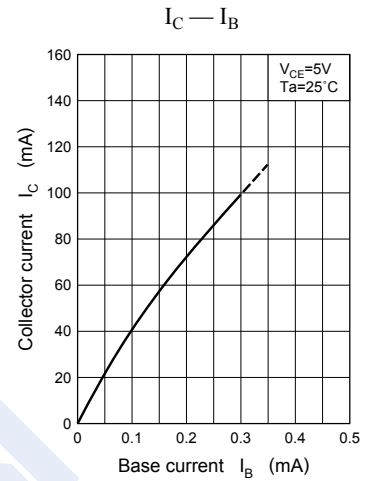
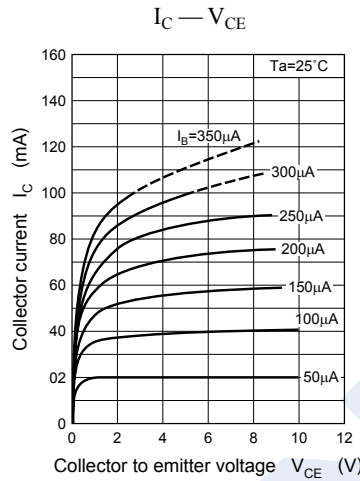
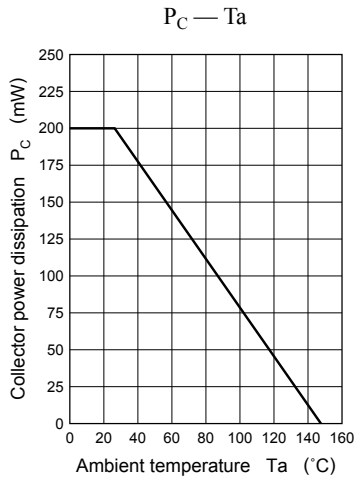
■ Classification of h_{fe}

Type	2SC2405-R	2SC2405-S	2SC2405-T
Range	180-360	260-520	360-700
Marking	SR	SS	ST

NPN Transistors

2SC2405

■ Typical Characteristics



NPN Transistors

2SC2405

Typical Characteristics

