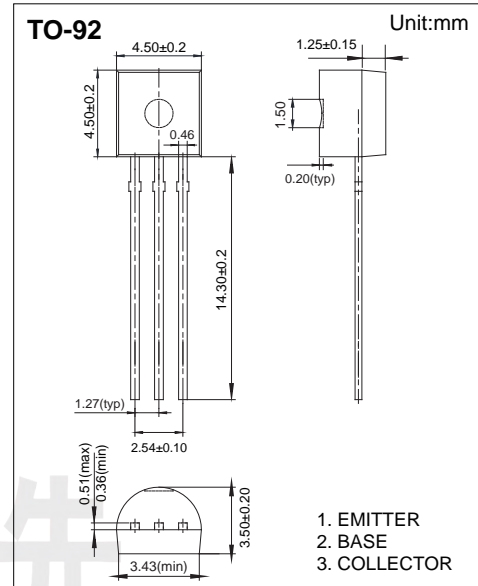


Transistor

PNP Transistors 2N3906

■ Features

- Collector current: $I_C = -0.2A$
- Complementary to 2N3904



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

Parameter	Symbol	Rating	Unit
Collector - Base Voltage	V_{CB0}	-40	V
Collector - Emitter Voltage	V_{CE0}	-40	
Emitter - Base Voltage	V_{EB0}	-5	
Collector Current - Continuous	I_C	-0.2	A
Collector Power Dissipation	P_C	625	mW
Junction Temperature	T_J	150	$^\circ C$
Storage Temperature	T_{stg}	-55 to 150	

Transistor

PNP Transistors 2N3906

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

Parameter	Symbol	Testconditions	Min	Typ	Max	Unit
Collector- base breakdown voltage	V_{CB0}	$I_C = -100 \mu\text{A}, I_E = 0$	-40			V
Collector- emitter breakdown voltage	V_{CE0}	$I_C = -1 \text{ mA}, I_B = 0$	-40			
Emitter - base breakdown voltage	V_{EB0}	$I_E = -100 \mu\text{A}, I_C = 0$	-5			
Collector cut-off current	I_{CBO}	$V_{CB} = -40 \text{ V}, I_E = 0$			-0.1	μA
Collector cut-off current	I_{CEX}	$V_{CE} = -30 \text{ V}, V_{BE(off)} = -3 \text{ V}$			-0.05	
Emitter cut-off current	I_{EBO}	$V_{EB} = -5 \text{ V}, I_C = 0$			-0.1	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -50 \text{ mA}, I_B = -5 \text{ mA}$			-0.4	V
Base - emitter saturation voltage	$V_{BE(sat)}$	$I_C = -50 \text{ mA}, I_B = -5 \text{ mA}$			-0.95	
DC current gain	$h_{FE(1)}$	$V_{CE} = -1 \text{ V}, I_C = -10 \text{ mA}$	100		400	
	$h_{FE(2)}$	$V_{CE} = -1 \text{ V}, I_C = -50 \text{ mA}$	60			
	$h_{FE(3)}$	$V_{CE} = -1 \text{ V}, I_C = -100 \text{ mA}$	30			
Delay Time	t_d	$V_{CC} = -3 \text{ V}, V_{BE} = -0.5 \text{ V}, I_C = -10 \text{ mA}, I_{B1} = -1 \text{ mA}$			35	ns
Rise Time	t_r				35	
Storage Time	t_s				225	
Fall Time	t_f				75	
Transition frequency	f_T	$V_{CE} = -20 \text{ V}, I_C = -10 \text{ mA}, f = 100 \text{ MHz}$	250			MHz

■ Classification of $h_{FE(1)}$

Rank	O	Y	G
Range	100-200	200-300	300-400

PNP Transistors 2N3906

Typical Characteristics

