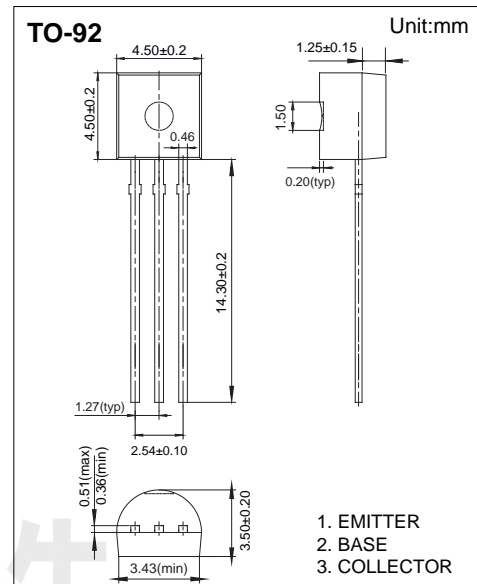


Transistor

NPN Transistors S8050

■ Features

- Collector current: $I_C=0.5A$
- Complementary to S8550



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

Parameter	Symbol	Rating	Unit
Collector - Base Voltage	V_{CB0}	40	V
Collector - Emitter Voltage	V_{CE0}	25	
Emitter - Base Voltage	V_{EB0}	5	
Collector Current - Continuous	I_C	0.5	A
Collector Power Dissipation	P_C	625	mW
Junction Temperature	T_J	150	$^\circ C$
Storage Temperature	T_{stg}	-55 to 150	

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

Parameter	Symbol	Testconditions	Min	Typ	Max	Unit
Collecto- base breakdown voltage	V_{CB0}	$I_C=100\mu A, I_E=0$	40			V
Collector- emitter breakdown voltage	V_{CE0}	$I_C=0.1mA, I_B=0$	25			
Emitter - base breakdown voltage	V_{EB0}	$I_E=100\mu A, I_C=0$	5			
Collector cut-off current	I_{CBO}	$V_{CB}=40V, I_E=0$			0.1	μA
Collector cut-off current	I_{CEO}	$V_{CE}=20V, I_B=0$			1	
Emitter cut-off current	I_{EBO}	$V_{EB}=5V, I_C=0$			0.1	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=500mA, I_B=50mA$			0.6	V
Base - emitter saturation voltage	$V_{BE(sat)}$	$I_C=500mA, I_B=50mA$			1.2	
DC current gain	$h_{FE(1)}$	$V_{CE}=1V, I_C=50mA$	85		400	
	$h_{FE(2)}$	$V_{CE}=1V, I_C=500mA$	50			
Transition frequency	f_T	$V_{CE}=6V, I_C=20mA, f=30MHz$	150			MHz

■ Classification of $h_{FE(1)}$

Rank	B	C	D	D3
Range	85-160	120-200	160-300	300-400

Transistor

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■ Typical Characteristics

