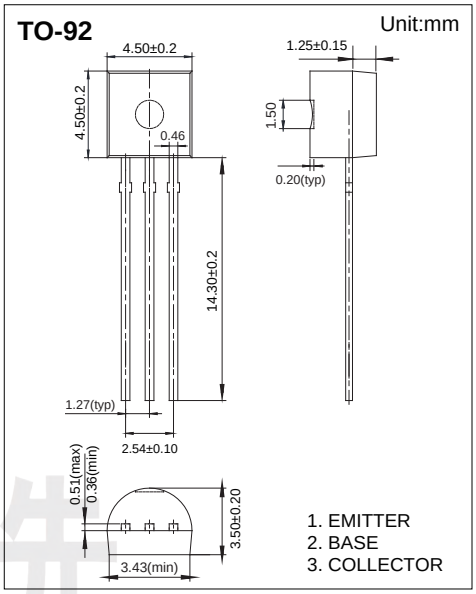
NPN Transistor

SS8050



■ Features

- ● High Total Power Dissipation.(Pc=1W,Ta=25℃)
- ● High Total Power Dissipation.(Pc=2W,Tc=25℃)

■ Absolute Maximum Ratings Ta = 25℃

Parameter		Symbol	Rating	Unit
Collector - Base Voltage		V_{CBO}	40	V
Collector - Emitter Voltage		V_{CEO}	25	
Emitter - Base Voltage		V_{EBO}	5	
Collector Current - Continuous		I_C	1.5	A
Collector Power Dissipation	Ta=25℃	PC	1	W
	Tc=25℃		2	
Junction Temperature		T_J	150	℃
Storage Temperature		T_{stg}	-55 to 150	

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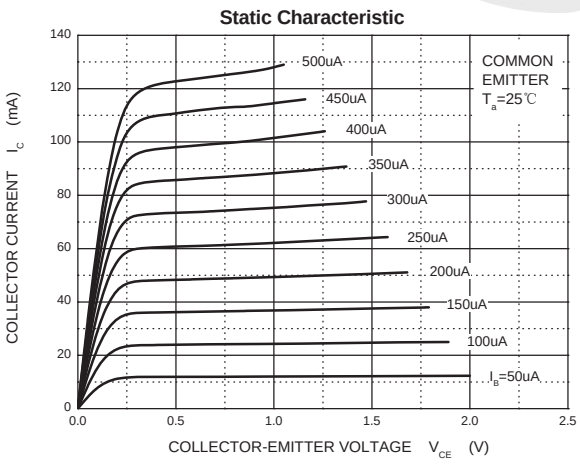
■ Electrical Characteristics Ta = 25℃

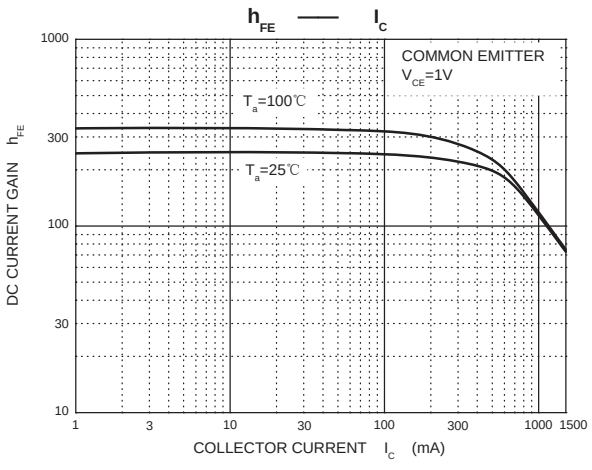
Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Collecto- base breakdown voltage	V_{CBO}	I_C= 100 μA， I_E=0	40			V
Collector- emitter breakdown voltage	V_{CEO}	I_C= 0.1 mA， I_B=0	25			
Emitter - base breakdown voltage	V_{EBO}	I_E= 100 μA， I_C=0	5			
Collector cut-off current	I_{CBO}	V_{CB}= 40 V , I_E=0			0.1	μA
Collector cut-off current	I_{CEO}	V_{CB}= 20 V , I_B=0			0.1	
Emitter cut-off current	I_{EBO}	V_{EB}= 5 V , I_C=0			0.1	
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C=800 mA, I_B= 80mA			0.5	V
Base - emitter saturation voltage	$V_{BE(sat)}$	I_C=800 mA, I_B= 80mA			1.2	
Base-emitter voltage	V_{BE}	V_{CE}= 1V, I_C= 10mA			1	V
DC current gain	$h_{FE(1)}$	V_{CE}= 1V, I_C= 100mA	85		400	
	$h_{FE(1)}$	V_{CE}= 1V, I_C= 800mA	40			
Transition frequency	f_T	V_{CE}= 10V, I_C= 50mA,f=30MHz	100			MHz

■ Classification of hFE(1)

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

■ Typical Characterisitics





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■ Typical Characterisitics