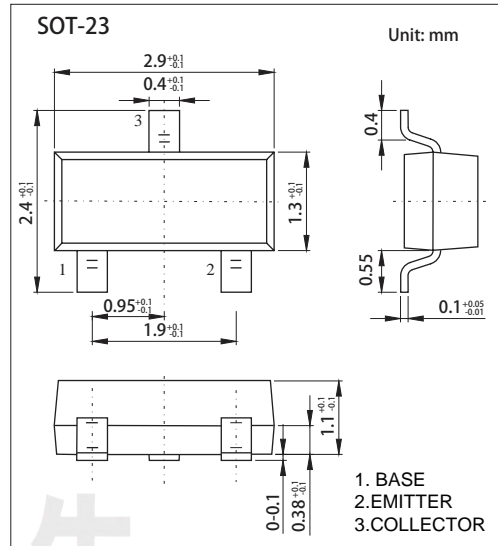


Transistor

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	500	mA
Collector Power Dissipation	P_c	300	mW
Thermal Resistance From Junction To Ambient	$R_{\theta JA}$	417	$^\circ C/W$
Junction Temperature	T_J	150	$^\circ C$
Storage Temperature	T_{stg}	-55 to 150	

Transistor

NPN Transistors S8050

■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Testconditions	Min	Typ	Max	Unit
Collecto- base breakdown voltage	V _{CB0}	I _C = 100 μA, I _E =0	40			V
Collector- emitter breakdown voltage	V _{CE0}	I _C = 1 mA, I _B =0	25			
Emitter - base breakdown voltage	V _{EB0}	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 _{CE} = 20 V, I _B =0			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 =500 mA, I _B = 50mA			0.6	V
Base - emitter saturation voltage	V _{BE(sat)}	I _C =500 mA, I _B = 50mA			1.2	
DC current gain	h _{FE(1)}	V _{CE} = 1V, I _C = 50mA	120		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	L	H	J
Range	120-200	200-350	300-400
Marking	J3Y		

Transistor

NPN Transistors S8050

Typical Characteristics

