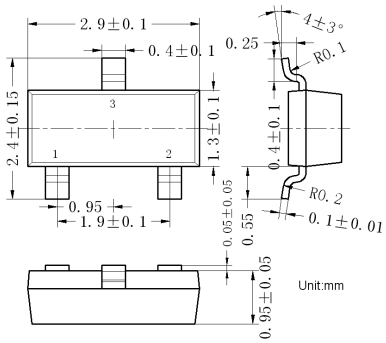
SHENZHEN LONG JING MICRO-ELECTRONICS CO., LTD.

SOT-23 Plastic-Encapsulate Transistors

SS8050 NPN Transistors



1. Base
2. Emitter
3. Collector

Features

■ Complimentary to SS8550

Marking: Y1

Maximum Ratings (T_a=25°C unless otherwise noted)

Symbol	Parameter	Value	Unit
V_{CBO}	Collector Base Voltage	40	V
V_{CEO}	Collector Emitter Voltage	25	V
V_{EBO}	Emitter Base Voltage	5	V
I_C	Collector Current	1.5	A
P_C	Collector Power Dissipation	300	mW
$R_{\theta JA}$	Thermal Resistance From Junction To Ambient	417	°C/W
T_j	Junction Temperature	150	°C
T_{stg}	Storage Temperature	-55 ~ +150	°C

Electrical Characteristics (T_a=25°C unless otherwise specified)

Symbol	Parameter	Test Conditions	Min	Typ	Max	Unit
$V_{(BR)CBO}$	Collector-base breakdown voltage	I_C = 100μA, I_E = 0	40			V
$V_{(BR)CEO}$	Collector-emitter breakdown voltage	I_C = 0.1mA, I_B = 0	25			V
$V_{(BR)EBO}$	Emitter-base breakdown voltage	I_E = 100μA, I_C = 0	5			V
I_{CBO}	Collector cut-off current	V_{CB} = 40V, I_E = 0			100	nA
I_{CEO}	Collector cut-off current	V_{CE} = 20V, I_B = 0			100	nA
I_{EBO}	Emitter cut-off current	V_{EB} = 5V, I_C = 0			100	nA
$h_{FE(1)}$	DC current gain	V_{CE} = 5V, I_C = 1mA	100			
$h_{FE(2)}$		V_{CE} = 1V, I_C = 100mA	100		350	
$h_{FE(3)}$		V_{CE} = 1V, I_C = 800mA	40			
$V_{CE(sat)}$	Collector-emitter saturation voltage	I_C = 800mA, I_B = 80mA			0.5	V
$V_{BE(sat)}$	Base-emitter saturation voltage	I_C = 800mA, I_B = 80mA			1.2	V
f_T	Transition frequency	V_{CE}=10V,I_C=50mA,f=30MHz	100			MHz

Classification OF $h_{FE(1)}$

Rank	L	H
Range	100-200	200-350

Typical Characteristics