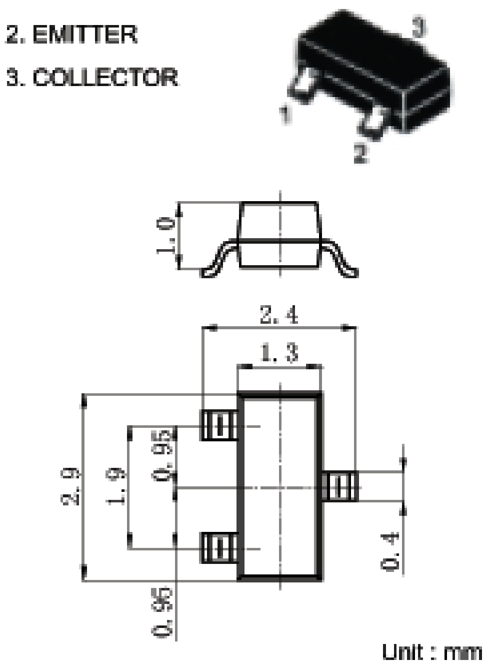
Changjiang

JIANGSU CHANGJIANG ELECTRONICS TECHNOLOGY CO.,LTD

SOT-23 Plastic-Encapsulate Transistors

SOT—23

1. BASE
2. EMITTER
3. COLLECTOR



S8050LT1 TRANSISTOR（ NPN ）

FEATURES

Power dissipation

P_{CM} : 0.3 W（Tamb=25℃）

Collector current

I_{CM} : 0.5 A

Collector-base voltage

$V_{(BR)CBO}$: 40 V

Operating and storage junction temperature range

T_J，T_{stg}: -55℃ to +150℃

ELECTRICAL CHARACTERISTICS（Tamb=25℃ unless otherwise specified）

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	Ic= 100 μ A，I_E=0	40			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	Ic= 0.1mA，I_B=0	25			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	I_E=100 μ A，I_C=0	5			V
Collector cut-off current	I_{CBO}	V_{CB}=40 V，I_E=0			0.1	μ A
Collector cut-off current	I_{CEO}	V_{CB}=20V，I_E=0			0.1	μ A
Emitter cut-off current	I_{EBO}	V_{EB}= 5V，I_C=0			0.1	μ A
DC current gain	$H_{FE(1)}$	V_{CE}=1V, I_C= 50mA	120		350	
	$H_{FE(2)}$	V_{CE}=1V, I_C= 500mA	50			
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	V
Base-emitter voltage	V_{BEF}	I_E= 100mA			1.4	V
Transition frequency	f_T	V_{CE}=6V, I_C= 20mA f=30MHz	150			MHz

CLASSIFICATION OF $H_{FE(1)}$

Rank	L	H
Range	120-200	200-350

DEVICE MARKING : S8050LT1=J3Y