



SOT-23 Plastic-Encapsulate Transistors

SS8050LT1 TRANSISTOR (NPN)

FEATURES

Power dissipation

$P_{CM} : 0.625 \text{ W (Tamb=25}^{\circ}\text{C)}$

Collector current

$I_{CM} : 1.5 \text{ A}$

Collector-base voltage

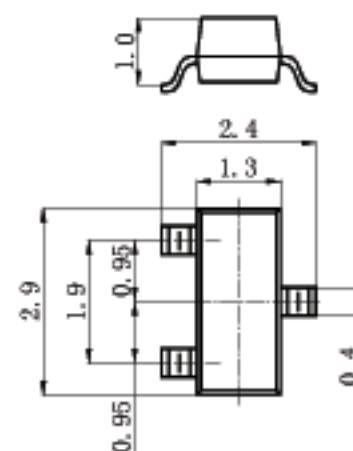
$V_{(BR)CBO} : 40 \text{ V}$

Operating and storage junction temperature range

$T_J, T_{stg} : -55^{\circ}\text{C to } +150^{\circ}\text{C}$

SOT—23

1. BASE
2. EMITTER
3. COLLECTOR



Unit : mm

ELECTRICAL CHARACTERISTICS (Tamb=25 °C unless otherwise specified)

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CB O}$	$I_C = 100 \mu A, I_E = 0$	40			V
Collector-emitter breakdown voltage	$V_{(BR)CE O}$	$I_C = 0.1mA, I_B = 0$	25			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E = 100 \mu A, I_C = 0$	6			V
Collector cut-off current	I_{CBO}	$V_{CB} = 40V, I_E = 0$			0.1	μA
Collector cut-off current	I_{CEO}	$V_{CB} = 20V, I_E = 0$			0.1	μA
Emitter cut-off current	I_{EBO}	$V_{EB} = 5V, I_C = 0$			0.1	μA
DC current gain	$H_{FE(1)}$	$V_{CE} = 1V, I_C = 100mA$	120		350	
	$H_{FE(2)}$	$V_{CE} = 1V, I_C = 800mA$	40			
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = 800mA, I_B = 80mA$			0.5	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C = 800mA, I_B = 80mA$			1.2	V
Base-emitter voltage	V_{BEF}	$I_E = 1.5A$			1.6	V
Transition frequency	f_T	$V_{CE} = 10V, I_C = 50mA, f = 30MHz$	100			MHz

CLASSIFICATION OF $H_{FE(1)}$

Rank	L	H
Range	120-200	200-350

DEVICE MARKING:

8050LT1=Y1