



SOT-23 Plastic-Encapsulate Transistors

SS8050LT1 TRANSISTOR (NPN)

FEATURES

Power dissipation

P_{CM} : 0.3 W ($T_{amb}=25$)

Collector current

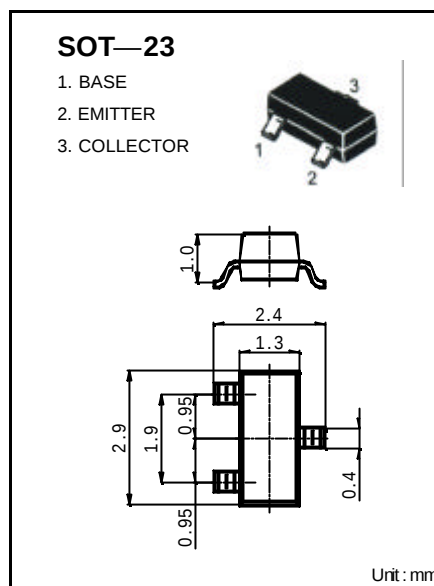
I_{CM} : 1.5 A

Collector-base voltage

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

Operating and storage junction temperature range

T_J , T_{stg} : -55 to +150



ELECTRICAL CHARACTERISTICS ($T_{amb}=25$ unless otherwise specified)

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C = 100 \mu A$, $I_E = 0$	40			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = 0.1mA$, $I_B = 0$	25			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E = 100 \mu A$, $I_C = 0$	5			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
Transition frequency	f_T	$V_{CE} = 10V$, $I_C = 50mA$ $f = 30MHz$	100			MHz

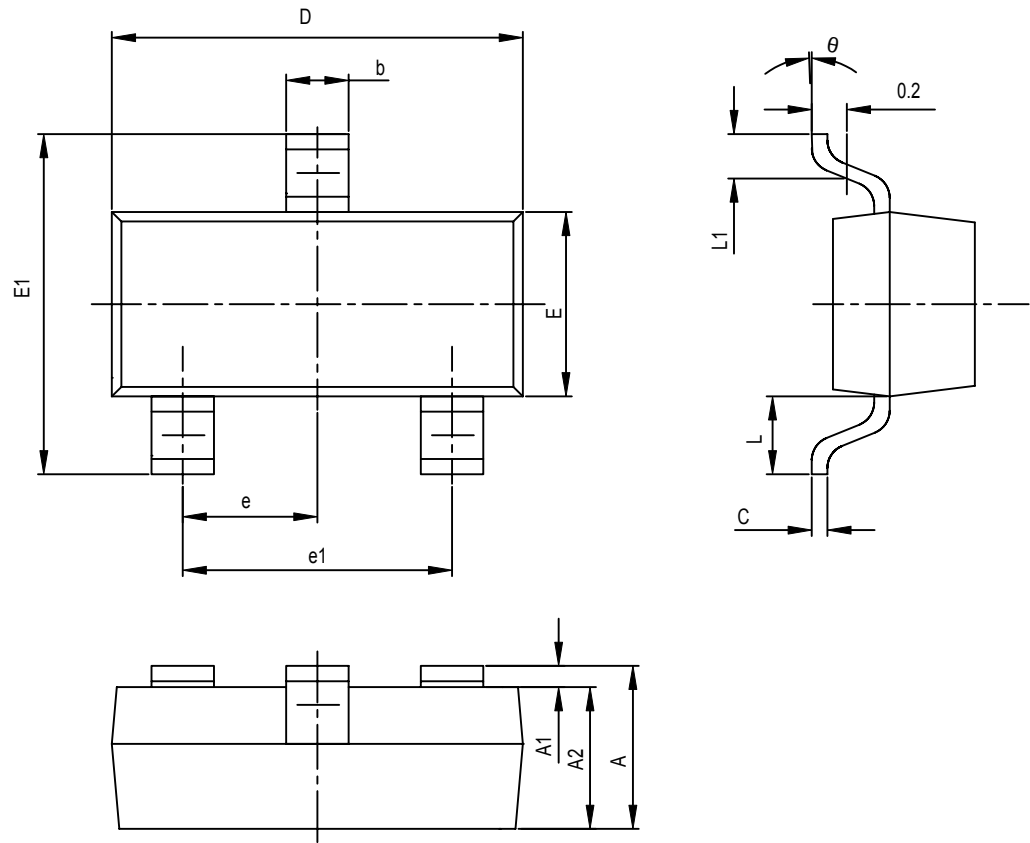
CLASSIFICATION OF $h_{FE(1)}$

Rank	L	H
Range	120-200	200-350

DEVICE MARKING:

8050LT1=Y1

SOT-23 PACKAGE OUTLINE DIMENSIONS



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	0.900	1.100	0.035	0.043
A1	0.000	0.100	0.000	0.004
A2	0.900	1.000	0.035	0.039
b	0.300	0.500	0.012	0.020
c	0.080	0.150	0.003	0.006
D	2.800	3.000	0.110	0.118
E	1.200	1.400	0.047	0.055
E1	2.250	2.550	0.089	0.100
e	0.950TPY		0.037TPY	
e1	1.800	2.000	0.071	0.079
L	0.550REF		0.022REF	
L1	0.300	0.500	0.012	0.020
θ	0°	8°	0°	8°