General Purpose Transistors
NPN Silicon

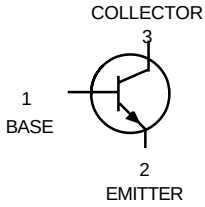
Dimensions SOT-23



FEATURE

- High current capacity in compact package.
  I_C =1.5 A.
- Epitaxial planar type.
- NPN complement: L8050H
- Pb-Free Package is available.
- S- Prefix for Automotive and Other Applications Requiring Unique Site and Control Change Requirements; AEC-Q101 Qualified and PPAP Capable.

Pin Configuration



DEVICE MARKING AND ORDERING INFORMATION

Device		Marking	Shipping
SS8050HPLT1G	S-SS8050HPLT1G	1HA	3000/Tape&Reel
SS8050HPLT3G	S-SS8050HPLT3G	1HA	10000/Tape&Reel
SS8050HQLT1G	S-SS8050HQLT1G	1HC	3000/Tape&Reel
SS8050HQLT3G	S-SS8050HQLT3G	1HC	10000/Tape&Reel
SS8050HRLT1G	S-SS8050HRLT1G	1HE	3000/Tape&Reel
SS8050HRLT3G	S-SS8050HRLT3G	1HE	10000/Tape&Reel
SS8050HSLT1G	S-SS8050HSLT1G	1HG	3000/Tape&Reel
SS8050HSLT3G	S-SS8050HSLT3G	1HG	10000/Tape&Reel

MAXIMUM RATINGS

Rating	Symbol	Max	Unit
Collector-Emitter Voltage	V_{CEO}	25	V
Collector-Base Voltage	V_{CBO}	40	V
Emitter-Base Voltage	V_{EBO}	5	V
Collector Current	I_C	1500	mAdc

THERMAL CHARACTERISTICS

Characteristic	Symbol	Max	Unit
Total Device Dissipation FR-5 Board,(1) T_A=25°C Derate above 25°C	P_D	 225 1.8	 mW mW/°C
Thermal Resistance,Junction to Ambient	$R\theta_{JA}$	556	°C/W
Total Device Dissipation Alumina Substrate,(2) TA=25°C Derate above 25°C	P_D	 300 2.4	 mW mW/°C
Thermal Resistance,Junction to Ambient	$R\theta_{JA}$	417	°C/W
Junction and Storage Temperature	T_j, T_{stg}	-55 to +150	℃

1. FR–5 = 1.0 x 0.75 x 0.062 in.
2. Alumina = 0.4 x 0.3 x 0.024 in. 99.5% alumina.

ELECTRICAL CHARACTERISTICS (T_A=25°C unless otherwise noted)

Characteristic	Symbol	Min	Typ	Max	Unit
OFF CHARACTERISTICS					
Collector-Emitter Breakdown Voltage (I_C=1.0mA)	$V_{(BR)CEO}$	25	–	–	V
Emitter-Base Breakdown Voltage (I_E=100μA)	$V_{(BR)EBO}$	5	–	–	V
Collector-Base Breakdown Voltage (I_C=100μA)	$V_{(BR)CBO}$	40	–	–	V
Collector Cutoff Current (V_{CB}=35V)	I_{CBO}	–	–	150	nA
Emitter Cutoff Current (V_{EB}=4V)	I_{EBO}	–	–	150	nA

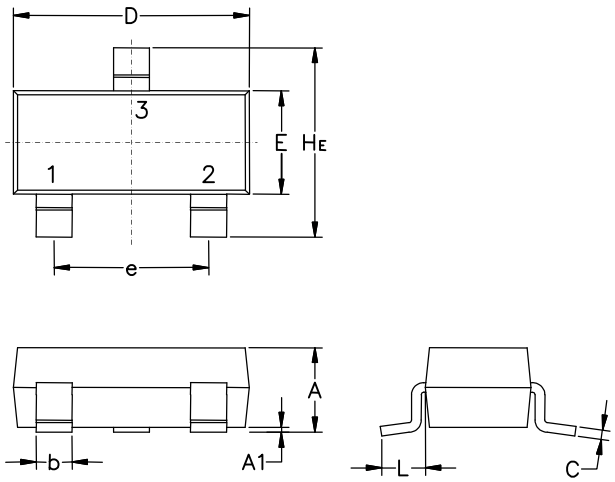
ELECTRICAL CHARACTERISTICS (T_A=25°C unless otherwise noted)

Characteristic	Symbol	Min	Typ	Max	Unit
ON CHARACTERISTICS					
DC Current Gain I_C=100mA,V_{CE}=1V	h_{FE}	100	-	600	
Collector-Emitter Saturation Voltage (I_C=800mA I_B=80mA)	$V_{CE(S)}$	-	-	0.5	V

NOTE :

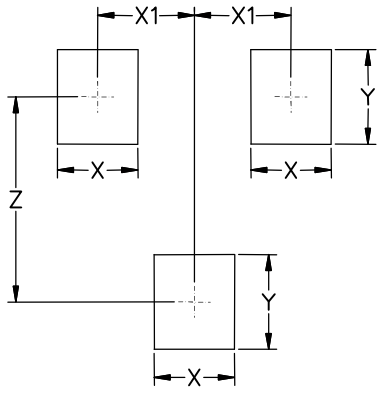
*	P	Q	R	S
h_{FE}	100~200	150~300	200~400	300~600

SOT-23 Package Outline & Dimensions



Symbol	Millimeters			Inches		
	Min.	Nom.	Max.	Min.	Nom.	Max.
A	0.89	1.00	1.11	0.035	0.040	0.044
A1	0.01	0.06	0.10	0.001	0.002	0.004
b	0.37	0.44	0.50	0.15	0.18	0.020
c	0.09	0.13	0.18	0.003	0.005	0.007
D	2.80	2.90	3.04	0.110	0.114	0.120
E	1.20	1.30	1.40	0.047	0.051	0.055
e	1.78	1.90	2.04	0.070	0.075	0.081
L	0.35	0.54	0.69	0.014	0.021	0.029
H_E	2.10	2.40	2.64	0.083	0.094	0.104

Soldering Footprint



Symbol	Millimeters	Inches
X	0.80	0.031
X1	0.95	0.037
Y	0.90	0.035
Z	2.00	0.079

Shanghai Leiditech Electronic Co.,Ltd
Email: sale1@leiditech.com
Tel : +86- 021 50828806
Fax : +86- 021 50477059