

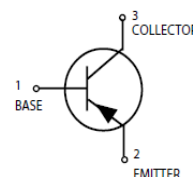
Dimensions SOT-23

FEATURE

- High current capacity in compact package.
- Epitaxial planar type.
- PNP complement: L8550H
- We declare that the material of product compliance with RoHS requirements.
- 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
S8550	1HD	3000/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	mA _{dc}

THERMAL CHARACTERISTICS

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

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 ($T_A=25^{\circ}\text{C}$ unless otherwise noted)

Characteristic	Symbol	Min	Typ	Max	Unit
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OFF CHARACTERISTICS

Collector-Emitter Breakdown Voltage ($I_C=-1.0\text{mA}$)	$V_{(BR)CEO}$	-25	—	—	V
Emitter-Base Breakdown Voltage ($I_E=-100\mu\text{A}$)	$V_{(BR)EBO}$	-5	—	—	V
Collector-Base Breakdown Voltage ($I_C=-100\mu\text{A}$)	$V_{(BR)CBO}$	-40	—	—	V
Collector Cutoff Current ($V_{CB}=-35\text{V}$)	I_{CBO}	—	—	-150	nA
Emitter Cutoff Current ($V_{EB}=-4\text{V}$)	I_{EBO}	—	—	-150	nA

ELECTRICAL CHARACTERISTICS ($T_A=25^{\circ}\text{C}$ unless otherwise noted)

Characteristic	Symbol	Min	Typ	Max	Unit
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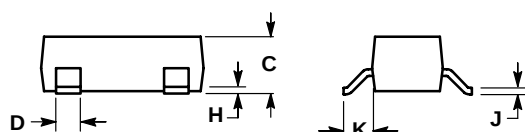
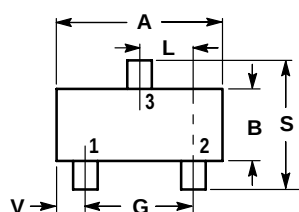
ON CHARACTERISTICS

DC Current Gain $I_C=-100\text{mA}, V_{CE}=-1\text{V}$	H_{FE}	100	-	600	
Collector-Emitter Saturation Voltage ($I_C=-800\text{mA}, I_B=-80\text{mA}$)	$V_{CE(S)}$	-	-	-0.5	V

SOT-23

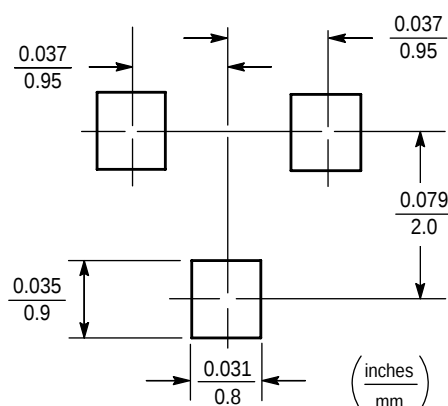
NOTES:

1. DIMENSIONING AND TOLERANCING PER ANSI Y14.5M,1982
2. CONTROLLING DIMENSION: INCH.



DIM	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.1102	0.1197	2.80	3.04
B	0.0472	0.0551	1.20	1.40
C	0.0350	0.0440	0.89	1.11
D	0.0150	0.0200	0.37	0.50
G	0.0701	0.0807	1.78	2.04
H	0.0005	0.0040	0.013	0.100
J	0.0034	0.0070	0.085	0.177
K	0.0140	0.0285	0.35	0.69
L	0.0350	0.0401	0.89	1.02
S	0.0830	0.1039	2.10	2.64
V	0.0177	0.0236	0.45	0.60

PIN 1. BASE
2. EMITTER
3. COLLECTOR



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