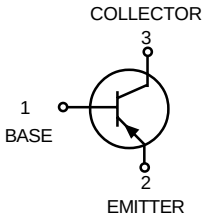
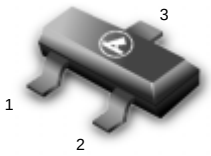
General Purpose Transistors

L8550HQLT1





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MAXIMUM RATINGS (EACH DIODE)

Rating	Symbol	Value	Unit
Collector-Emitter Voltage	V_{CEO}	25	V
Collector-Base voltage	V_{CBO}	40	V
Emitter-base Voltage	V_{EBO}	5	V
Collector current-continuoun	I_C	1500	mAdc

THERMAL CHARACTERISTICS

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

DEVICE MARKING

L8550HQLT1 = 1HD

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} = 35 V)	I_{CBO}	–	–	150	nA
Emitter Cutoff Current (V_{EB} =4V)	I_{EBO}	–	–	150	nA

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.

L8550HQLT1

ON CHARACTERISTICS

Characteristic	Symbol	Min	Typ	Max	Unit
DC Current Gain (I_C =50mA V_{CE}=1V)	h_{FE}	150	–	300	
Collector-Emitter Saturation Voltage (I_C =500mA I_B=50mA)	$V_{CE(S)}$	–	–	0.5	V

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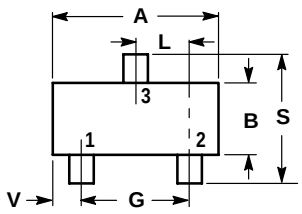

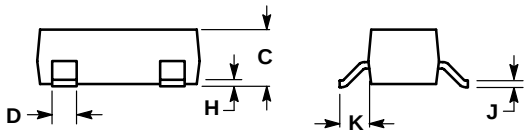

NOTES:

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