General Purpose Transistors

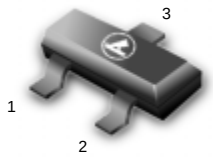
PNP Silicon

L8550PLT1G Series
S-L8550PLT1G Series

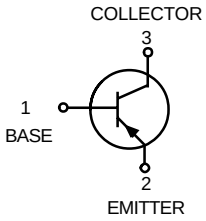
FEATURE

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.



SOT– 23



DEVICE MARKING AND ORDERING INFORMATION

Device		Marking	Shipping
L8550PLT1G	s-L8550PLT1G	85P	3000/Tape&Reel
L8550PLT3G	s-L8550PLT3G	85P	10000/Tape&Reel
L8550QLT1G	s-L8550QLT1G	1YD	3000/Tape&Reel
L8550QLT3G	s-L8550QLT3G	1YD	10000/Tape&Reel
L8550RLT1G	s-L8550RLT1G	1YF	3000/Tape&Reel
L8550RLT3G	s-L8550RLT3G	1YF	10000/Tape&Reel
L8550SLT1G	s-L8550SLT1G	1YH	3000/Tape&Reel
L8550SLT3G	s-L8550SLT3G	1YH	10000/Tape&Reel

MAXIMUM RATINGS

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	-800	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

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.

L8550PLT1G Series
S-L8550PLT1G Series

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

Characteristic	Symbol	Min	Typ	Max	Unit
OFFCHARACTERISTICS					
Collector-Emitter Breakdown Voltage (I_C =-1.0mA)	$V_{(BR)CEO}$	-25	–	–	V
Emitter-Base Breakdown Voltage (I_E = -100 μA)	$V_{(BR)EBO}$	-5	–	–	V
Collector-Base Breakdown voltage (I_C= -100 μA)	$V_{(BR)CBO}$	-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.

ON CHARACTERISTICS

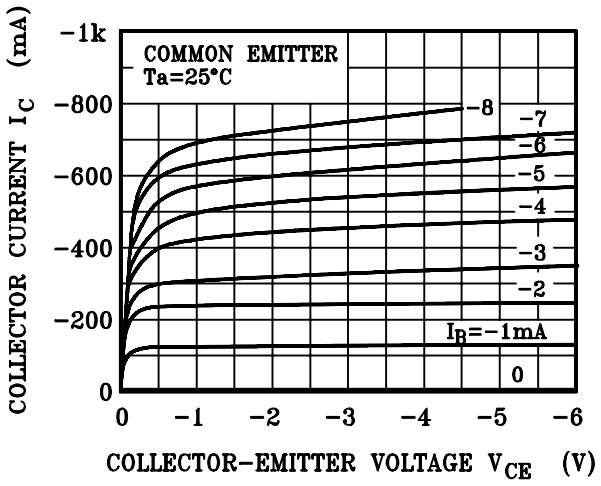
Characteristic	Symbol	Min	Typ	Max	Unit
DC Current Gain (I_C =-100mA, V_{CE}=-1V)	H_{FE}	100	–	600	
Collector-Emitter Saturation Voltage (I_C =-800mA, I_B=-80mA)	$V_{CE(S)}$	–	–	-0.5	V

NOTE:

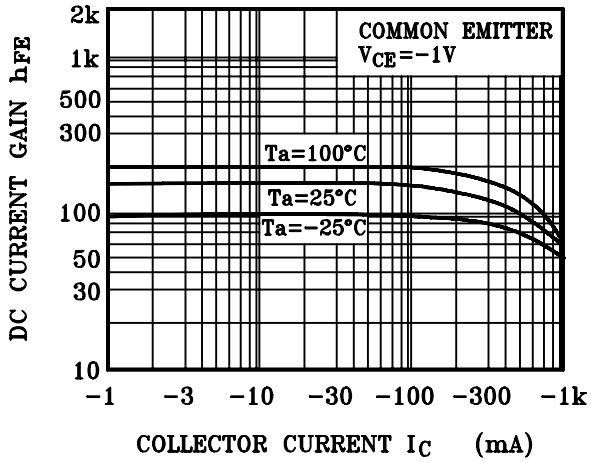
*	P	Q	R	S
h_{FE}	100~200	150~300	200~400	300~600

L8550PLT1G
Series
S-L8550PLT1G
Series

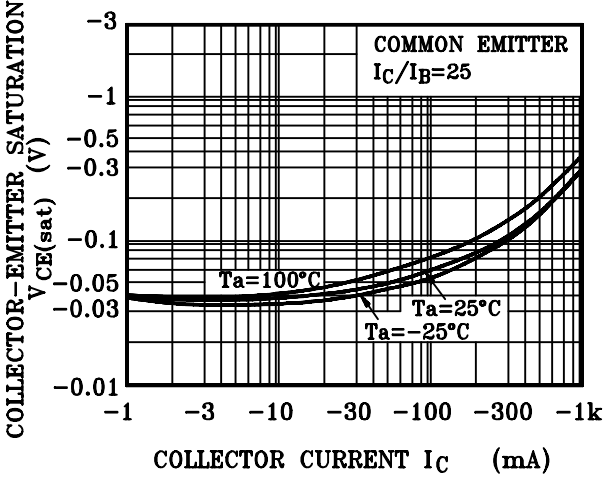
$I_C - V_{CE}$



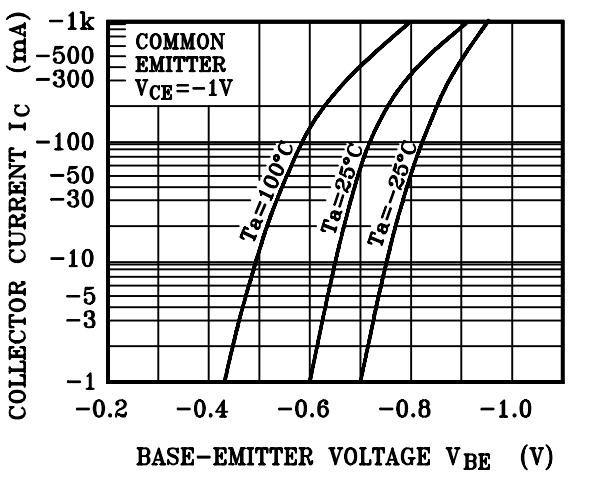
$h_{FE} - I_C$



$V_{CE(sat)} - I_C$

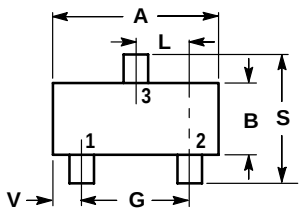


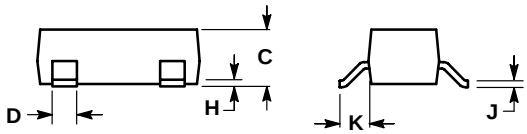
$I_C - V_{BE}$



L8550PLT1G
Series
S-L8550PLT1G
Series

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

