

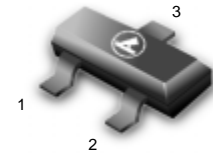
# General Purpose Transistors

## PNP Silicon

### 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.

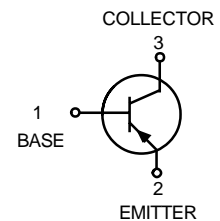
L8550PLT1G  
 Series  
 S-L8550PLT1G  
 Series



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-continuous	$I_C$	-800	mAdc

### THERMAL CHARACTERISTICS

Characteristic	Symbol	Max	Unit
Total Device Dissipation FR-5 Board (1) $T_A = 25\text{ }^\circ\text{C}$	$P_D$	225	mW
Derate above 25 °C		1.8	mW/°C
Thermal Resistance, Junction to Ambient	$R_{\theta JA}$	556	°C/W
Total Device Dissipation Alumina Substrate, (2) $T_A = 25\text{ }^\circ\text{C}$	$P_D$	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.

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

Characteristic	Symbol	Min	Typ	Max	Unit
<b>OFF CHARACTERISTICS</b>					
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

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

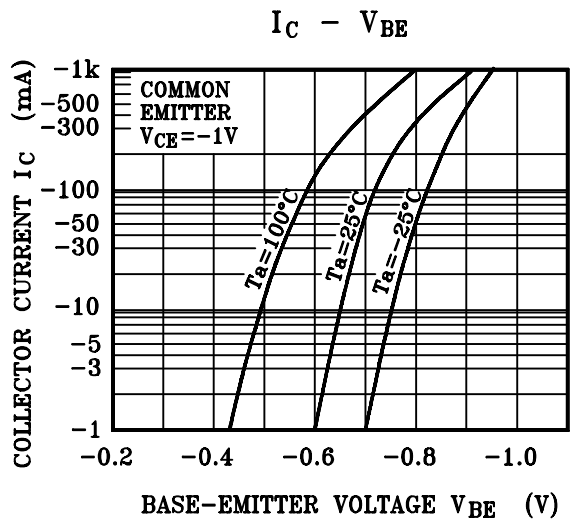
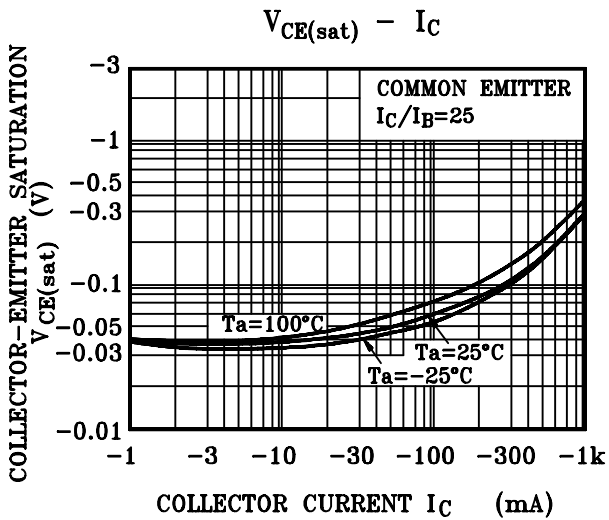
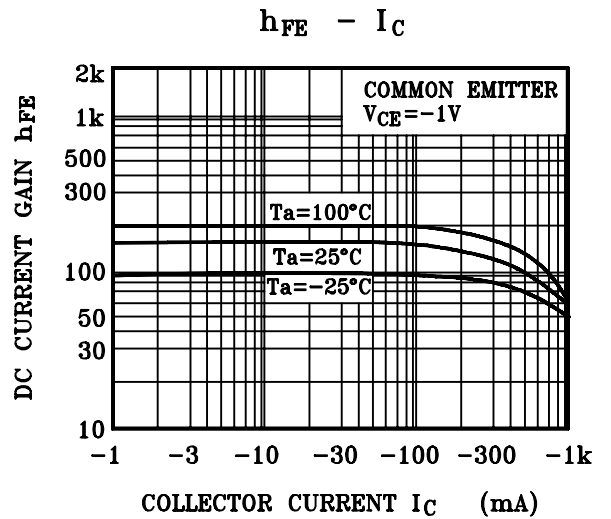
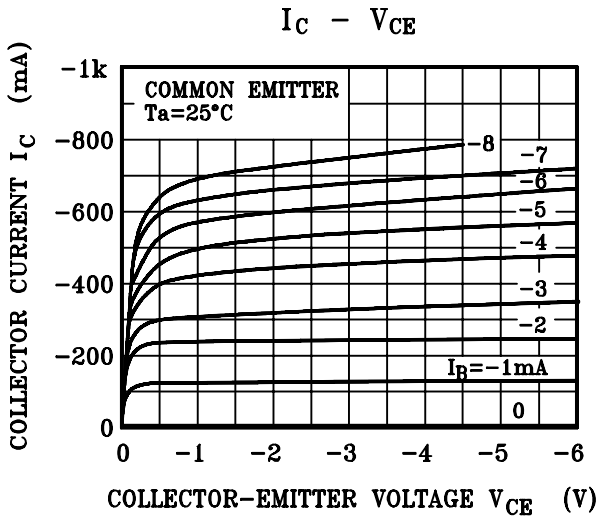
**ON CHARACTERISTICS**

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

**NOTE:**

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

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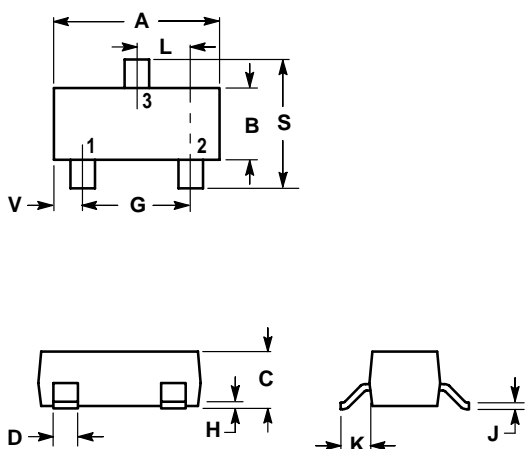


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NOTES:

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

