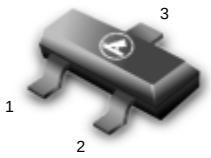
General Purpose Transistors

PNP Silicon

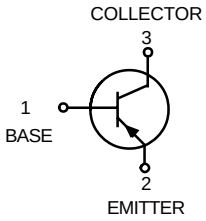
L8550PLT1G Series

FEATURE

We declare that the material of product compliance with RoHS requirements.



SOT– 23



DEVICE MARKING AND ORDERING INFORMATION

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

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

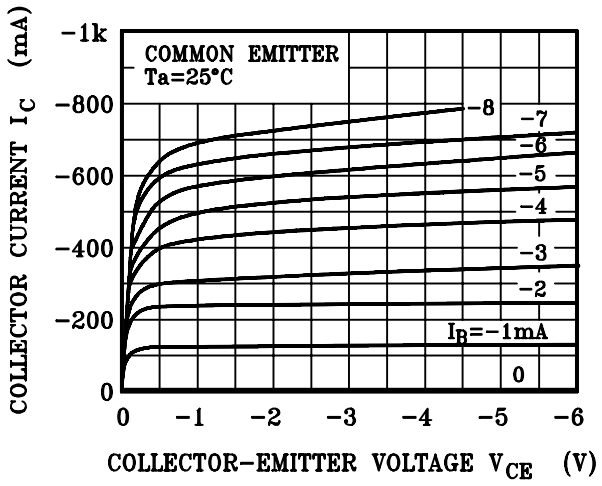
Characteristic	Symbol	Min	Typ	Max	Unit
DC Current Gain (I_C =-100mA, V_{CE}=-1V)	H_{FE}	100	–	600	
Collector-Emitter Saturation Voltage (I_C =-800mA, I_B=-80mA)	$V_{CE(S)}$	–	–	-0.5	V

NOTE:

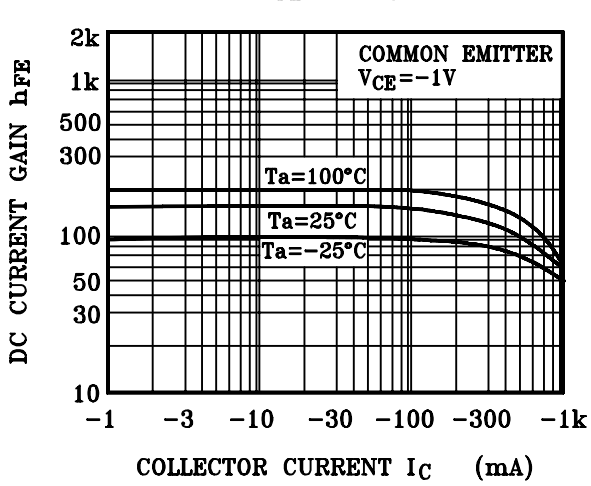
*	P	Q	R	S
h_{FE}	100~200	150~300	200~400	300~600

L8550PLT1G
Series

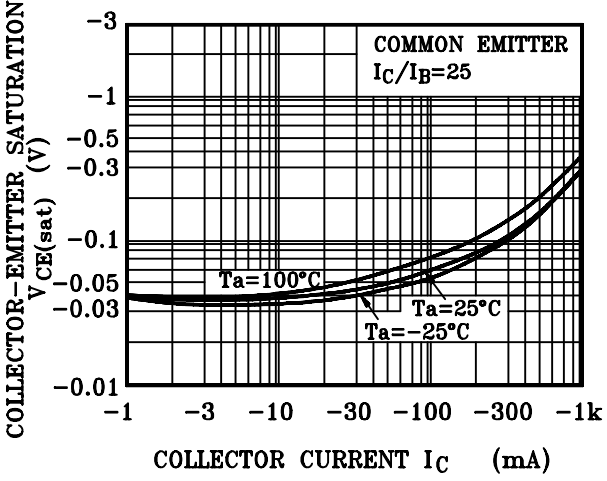
$I_C - V_{CE}$



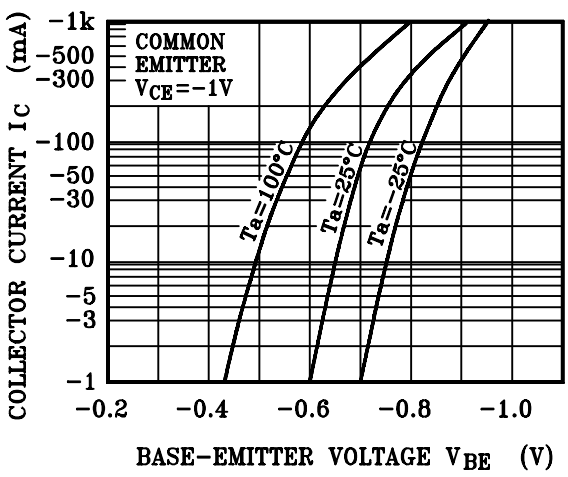
$h_{FE} - I_C$



$V_{CE(sat)} - I_C$

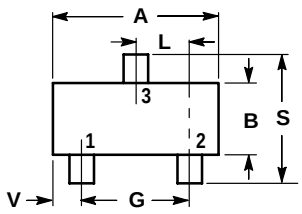


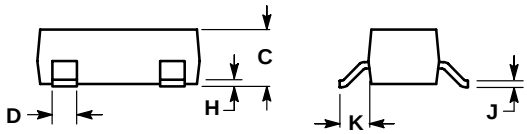
$I_C - V_{BE}$



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