

General Purpose Transistors

NPN Silicon

FEATURE

- High current capacity in compact package.
 $I_C = 1.5A$.
- Epitaxial planar type.
- NPN complement: LH8050
- Pb-Free Package is available.
- S- Prefix for Automotive and Other Applications Requiring Unique Site and Control Change Requirements; AEC-Q101 Qualified and PPAP Capable.

DEVICE MARKING AND ORDERING INFORMATION

Device	Marking	Shipping
(S-)LH8050PLT1G	KEO	3000/Tape&Reel
(S-)LH8050PLT3G	KEO	10000/Tape&Reel
(S-)LH8050QLT1G	KEY	3000/Tape&Reel
(S-)LH8050QLT3G	KEY	10000/Tape&Reel

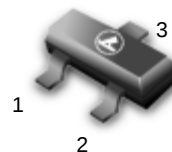
MAXIMUM RATINGS

Rating	Symbol	Max	Unit
Collector-Emitter Voltage	V_{CEO}	50	V
Collector-Base Voltage	V_{CBO}	50	V
Emitter-Base Voltage	V_{EBO}	6	V
Collector Current-continuoun	I_C	1500	mAdc

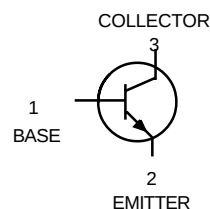
THERMAL CHARACTERISTICS

Characteristic	Symbol	Max	Unit
Total Dissipation Power	P_D	225	mW
Junction and Storage Temperature	T_j, T_{stg}	-55 to +150	°C

LH8050PLT1G
Series
S-LH8050PLT1G
Series



SOT-23



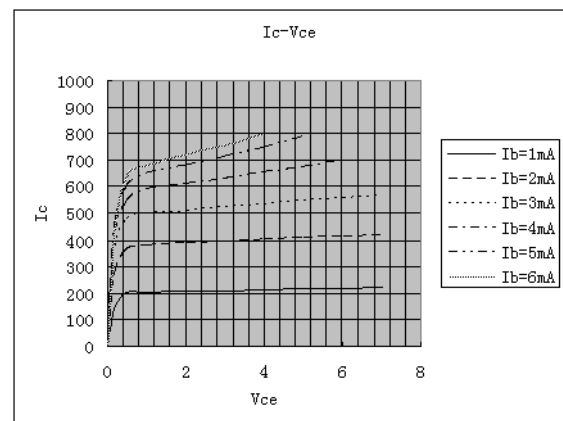
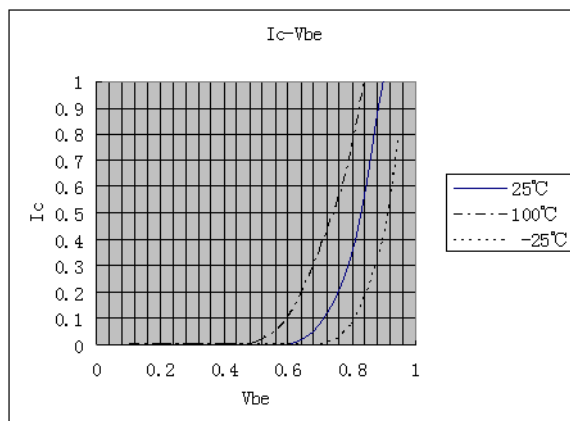
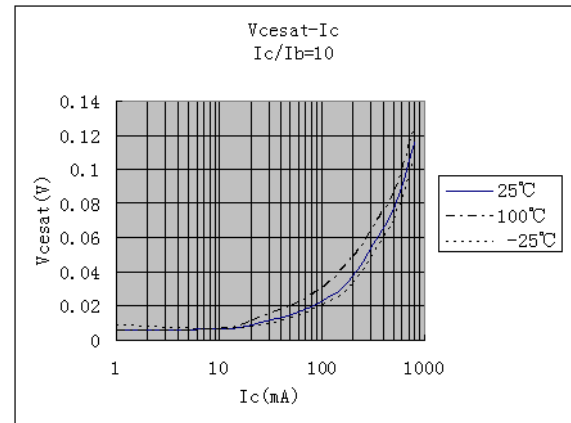
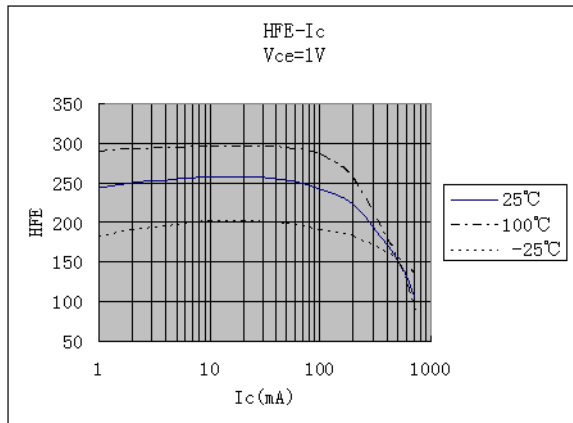
LH8050PLTIG Series , S-LH8050PLTIG Series

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

Characteristic	Symbol	Min	Typ	Max	Unit
Collector-Emitter Breakdown Voltage ($I_C=2.0\text{mA}, I_B=0$)	$V_{(BR)CEO}$	50	—	—	V
Emitter-Base Breakdown Voltage ($I_E=100\mu\text{A}, I_C=0$)	$V_{(BR)EBO}$	6	—	—	V
Collector-Base Breakdown Voltage ($I_C=100\mu\text{A}, I_E=0$)	$V_{(BR)CBO}$	50	—	—	V
Collector Cutoff Current ($V_{CB}=35\text{V}, I_E=0$)	I_{CBO}	—	—	100	nA
Emitter Cutoff Current ($V_{EB}=6\text{V}, I_C=0$)	I_{EBO}	—	—	100	nA
Base-Emitter Voltage ($V_{CE}=1\text{V}, I_C=10\text{mA}$)	V_{BE}	—	0.66	1	V
DC Current Gain $I_C=100\text{mA}, V_{CE}=1\text{V}$	h_{FE}^*	100	-	320	
DC Current Gain $I_C=800\text{mA}, V_{CE}=1\text{V}$	h_{FE}	40	-	-	
Collector-Emitter Saturation Voltage ($I_C=800\text{mA}, I_B=80\text{mA}$)	$V_{CE(S)}$	-	-	0.5	V

NOTE :

*	P	Q
h_{FE}	100~200	160~320

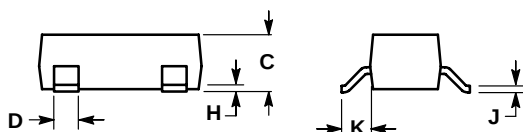
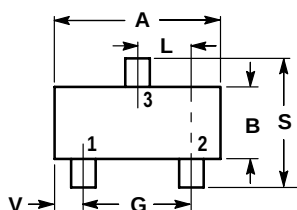
LH8050PLTIG Series , S-LH8050PLTIG Series
Electrical Characteristic Curves ($T_A=25^\circ\text{C}$)


LH8050PLTIG Series , S-LH8050PLTIG Series

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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

