

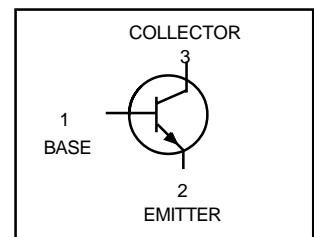
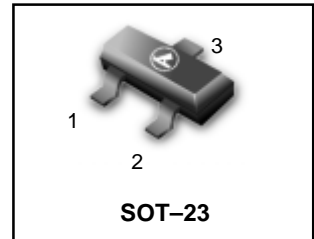
General Purpose Transistors

NPN Silicon

FEATURE

- High current capacity in compact package.
 $I_c = 0.8A$.
- Epitaxial planar type.
- NPN complement: L8050
- 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.

L8050PLT1G
Series
S-L8050PLT1G
Series



DEVICE MARKING AND ORDERING INFORMATION

Device	Marking	Shipping
L8050PLT1G	S-L8050PLT1G 80P	3000/Tape&Reel
L8050PLT3G	S-L8050PLT3G 80P	10000/Tape&Reel
L8050QLT1G	S- L8050QLT1G 1YC	3000/Tape&Reel
L8050QLT3G	S-L8050QLT3G 1YC	10000/Tape&Reel
L8050RLT1G	S-L8050RLT1G 1YE	3000/Tape&Reel
L8050RLT3G	S-L8050RLT3G 1YE	10000/Tape&Reel
L8050SLT1G	S-L8050SLT1G 80S	3000/Tape&Reel
L8050SLT3G	S-L8050SLT3G 80S	10000/Tape&Reel

MAXIMUM RATINGS

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

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.

L8050PLT1G
Series
S-L8050PLT1G
Series

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

Characteristic	Symbol	Min	Typ	Max	Unit
----------------	--------	-----	-----	-----	------

OFF CHARACTERISTICS

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

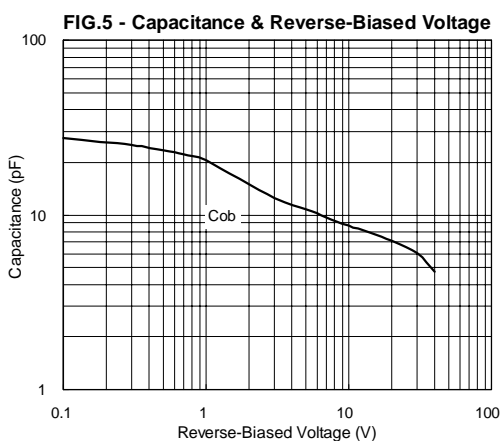
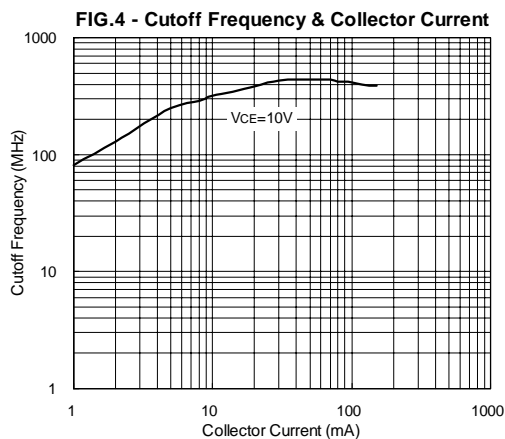
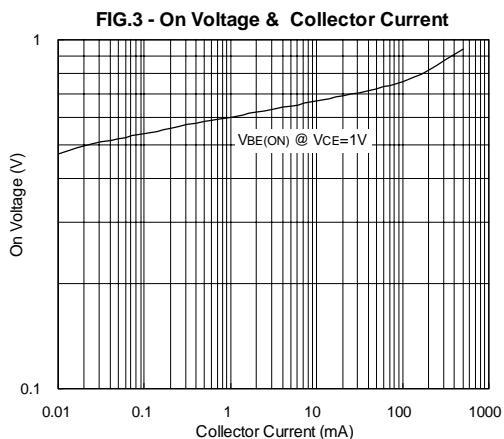
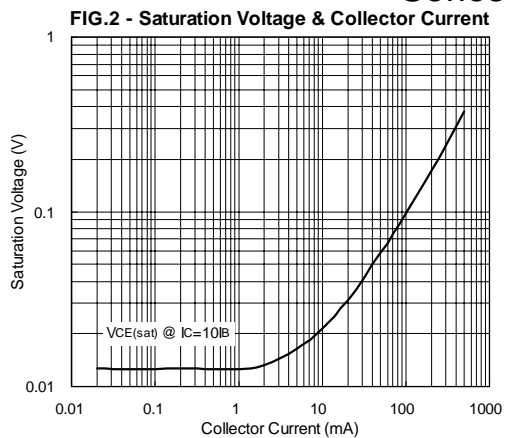
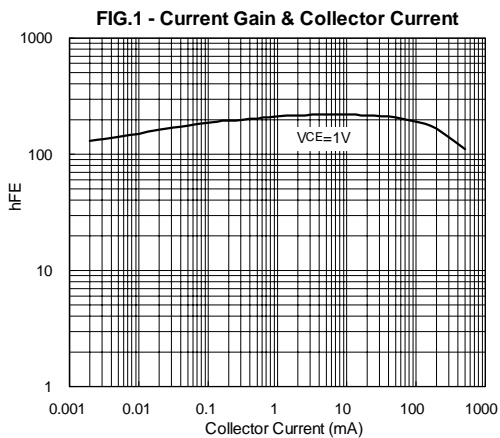
ELECTRICAL CHARACTERISTICS ($T_A=25^{\circ}\text{C}$ unless otherwise noted)

Charateristic	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 ($I_C=800\text{mA}, I_B=80\text{mA}$)	$V_{CE(sat)}$	-	-	0.5	V

NOTE :

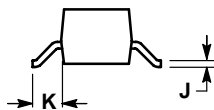
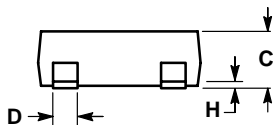
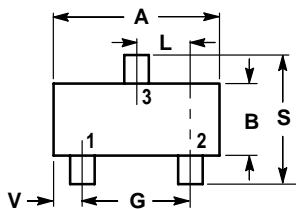
*	P	Q	R	S
h_{FE}	100~200	150~300	200-400	300-600

L8050PLT1G
Series
S-L8050PLT1G
Series



L8050PLT1G
Series
S-L8050PLT1G
Series

SOT-23

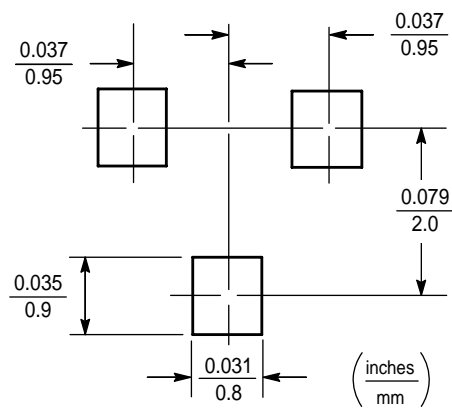


NOTES:

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



X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for [Bipolar Transistors - BJT category:](#)

Click to view products by [Leshan manufacturer:](#)

Other Similar products are found below :

[BC559C](#) [MCH4017-TL-H](#) [MMBT-2369-TR](#) [BC546/116](#) [NJVMJD148T4G](#) [NTE16](#) [NTE195A](#) [IMX9T110](#) [2N4401-A](#) [2N4403](#) [2N6728](#)
[2SA1419T-TD-H](#) [2SA2126-E](#) [2SB1204S-TL-E](#) [FMC5AT148](#) [2N2369ADCSM](#) [2N2907A](#) [2N3904-NS](#) [2N5769](#) [2SC4618TLN](#) [CPH6501-](#)
[TL-E](#) [MCH4021-TL-E](#) [Jantx2N5416](#) [US6T6TR](#) [BAX18/A52R](#) [BC556/112](#) [IMZ2AT108](#) [MMST8098T146](#) [UMX21NTR](#) [MCH6102-TL-E](#)
[TTA1452B,S4X\(S](#) [2N3879](#) [NTE13](#) [NTE282](#) [NTE323](#) [NTE350](#) [NTE81](#) [JANTX2N2920L](#) [JANTX2N3735](#) [JANSR2N2222AUB](#)
[CMLT3946EG TR](#) [SNSS40600CF8T1G](#) [CMLT3906EG TR](#) [GRP-DATA-JANS2N2907AUB](#) [GRP-DATA-JANS2N2222AUA](#)
[MMDT3946FL3-7](#) [2N4240](#) [MSB30KH-13](#) [2N2221AUB](#) [2SD1815T-TL-E](#)