

General Purpose Transistors

PNP Silicon

FEATURE

- Complementary to L9014.
- 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.

DEVICE MARKING AND ORDERING INFORMATION

Device	Marking	Shipping
L9015QLT1G S-L9015QLT1G	15Q	3000/Tape&Reel
L9015QLT3G S-L9015QLT3G	15Q	10000/Tape&Reel
L9015RLT1G S-L9015RLT1G	15R	3000/Tape&Reel
L9015RLT3G S-L9015RLT3G	15R	10000/Tape&Reel
L9015SLT1G S-L9015SLT1G	15S	3000/Tape&Reel
L9015SLT3G S-L9015SLT3G	15S	10000/Tape&Reel

MAXIMUM RATINGS

Rating	Symbol	Value	Unit
Collector-Emitter Voltage	V_{CEO}	-45	V
Collector-Base Voltage	V_{CBO}	-50	V
Emitter-Base Voltage	V_{EBO}	-5	V
Collector current-continuoun	I_C	-100	mA

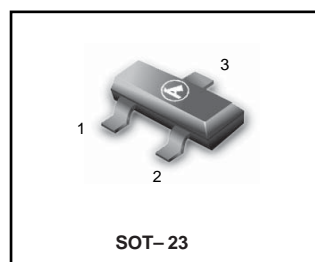
THERMAL CHARATEERISTICS

Characteristic	Symbol	Max	Unit
Total Device Dissipation FR-5 Board.(1) $T_A=25^{\circ}\text{C}$ Derate above 25°C	P_D	225 1.8	mW mW/ $^{\circ}\text{C}$
Thermal Resistance, Junction to Ambient	R_{JA}	556	$^{\circ}\text{C/W}$
Total Device Dissipation Alumina Substrate, (2) $T_A=25^{\circ}\text{C}$ Derate above 25°C	P_D	300 2.4	mW mW/ $^{\circ}\text{C}$
Thermal Resistance, Junction to Ambient	R_{JA}	417	$^{\circ}\text{C/W}$
Junction and Storage Temperature	T_J, T_{stg}	-55 to +150	$^{\circ}\text{C}$

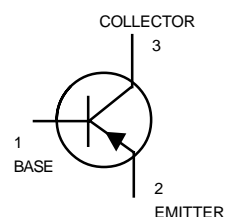
1. FR-5 = 1.0 x 0.75 x 0.062 in.

2. Alumina = 0.4 x 0.3 x 0.024 in. 99.5% alumina.

L9015QLT1G
Series
S-L9015QLT1G
Series



SOT-23



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

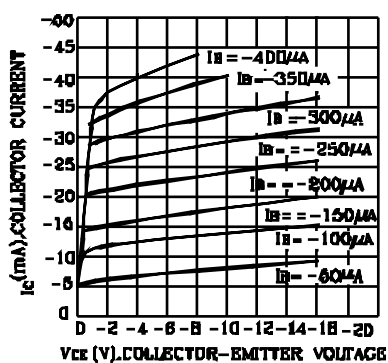
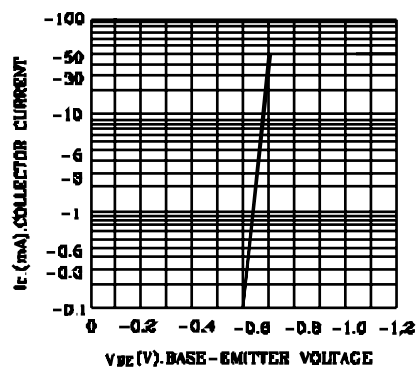
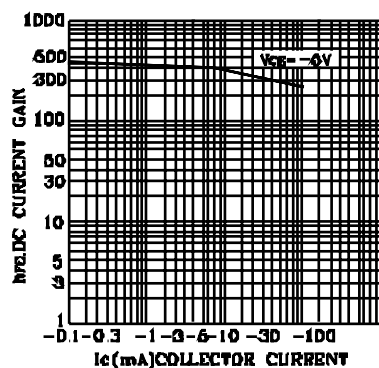
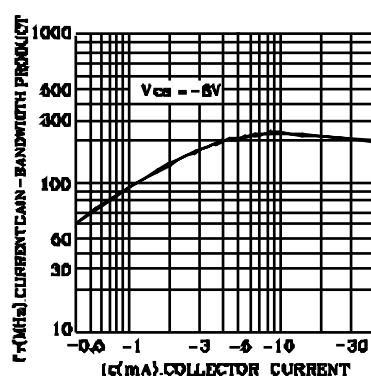
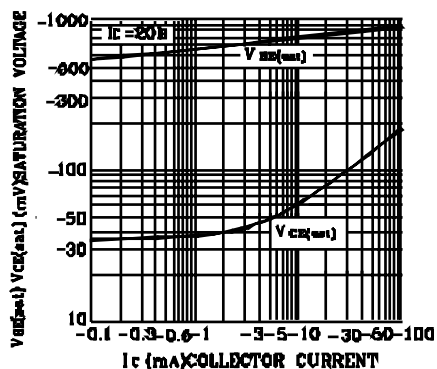
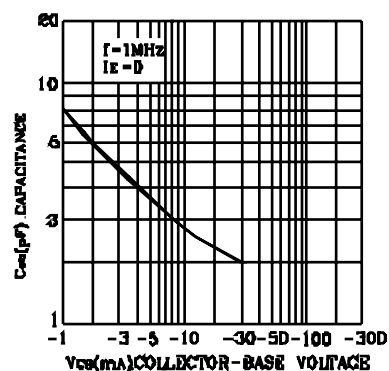
OFF CHARACTERISTICS

Characteristic	Symbol	Min	Typ	Max	Unit
Collector-Emitter Breakdown Voltage (I _C =-1.0mA)	V(BR) _{CEO}	-45	-	-	V
Emitter-Base Breakdown Voltage (I _E =-100μA)	V(BR) _{EBO}	-5	-	-	V
Collector-Base Breakdown Voltage (I _C =-100μA)	V(BR) _{CBO}	-50	-	-	V
Collector Cutoff Current (V _{CB} =-40V)	I _{CBO}	-	-	-100	nA
Emitter Cutoff Current (V _{EB} =-3V)	I _{EBO}	-	-	-100	nA

ON CHARACTERISTICS

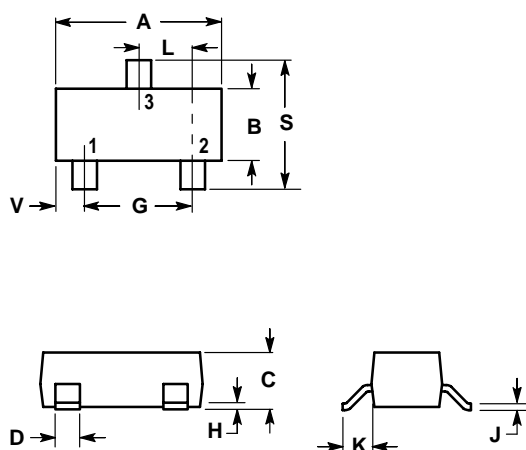
DC Current Gain (I _C =-1mA, V _{CE} =-5V)	H _{FE}	150	-	600	
Collector-Emitter Saturation Voltage (I _C =-100mA, I _B =-5mA)	V _{CE}	-	-	-0.3	V

NOTE:	*	Q	R	S
	H _{FE}	150~300	200~400	300~600

L9015QLT1G Series
S-L9015QLT1G Series
STATIC CHARACTERISTIC

BASE-EMITTER VOLTAGE

DC CURRENT GAIN

CURRENT GAIN-BANDWIDTH PRODUCT

BASE-EMITTER SATURATION VOLTAGE
COLLECTOR-EMITTER SATURATION VOLTAGE

COLLECTOR OUTPUT CAPACITANCE


L9015QLT1G Series
S-L9015QLT1G 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

