General Purpose Transistors

PNP Silicon

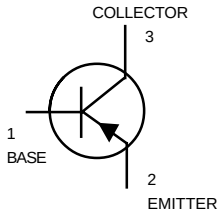
L9015XLT1G



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FEATURE

- Complementary to L9014.
- We declare that the material of product compliance with RoHS requirements.



DEVICE MARKING AND ORDERING INFORMATION

Device	Marking	Shipping
L9015QLT1G	15Q	3000/Tape&Reel
L9015QLT3G	15Q	10000/Tape&Reel
L9015RLT1G	15R	3000/Tape&Reel
L9015RLT3G	15R	10000/Tape&Reel
L9015SLT1G	15S	3000/Tape&Reel
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. T_A=25°C Derate above 25°C	P_D	 225 1.8	 mW mW/°C
Thermal Resistance, Junction to Ambient	R_{JA}	556	°C/W
Total Device Dissipation Alumina Substrate, (2) TA=25 °C Derate above 25°C	P_D	 300 2.4	 mW mW/°C
Thermal Resistance, Junction to Ambient	R_{JA}	417	°C/W
Junction and Storage Temperature	T_J ,T_{stg}	-55 to +150	°C

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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

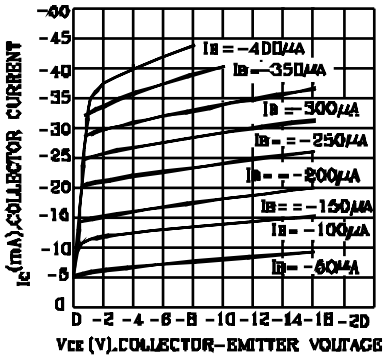
ON CHARACTERISTICS

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

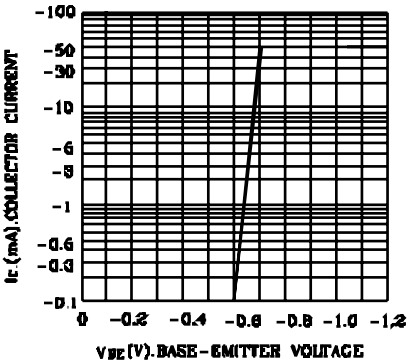
NOTE:	*	Q	R	S
	H_{FE}	150~300	200~400	300~600

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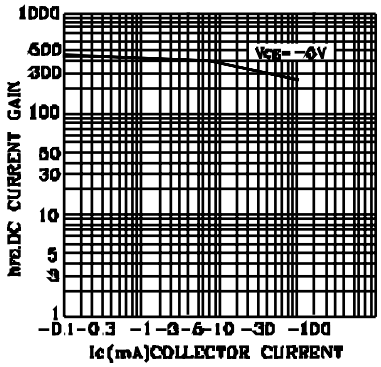
STATIC CHARACTERISTIC



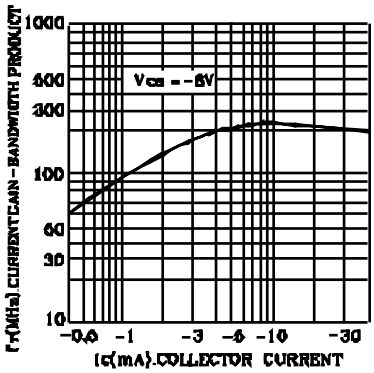
BASE-EMITTER VOLTAGE



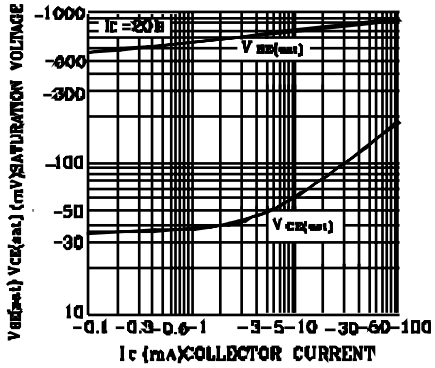
DC CURRENT GAIN



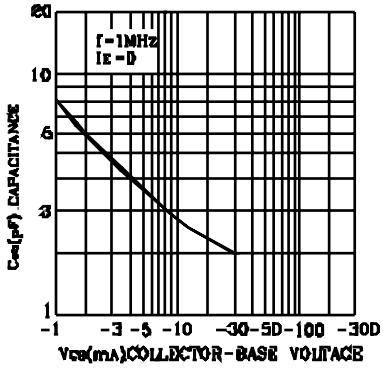
CURRENT GAIN-BANDWIDTH PRODUCT



BASE-EMITTER SATURATION VOLTAGE
COLLECTOR-EMITTER SATURATION VOLTAGE

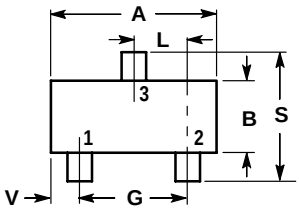


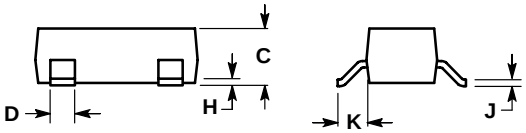
COLLECTOR OUTPUT CAPACITANCE



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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

