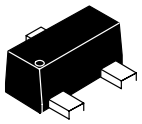
General Purpose Transistors

NPN Silicon

- 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.

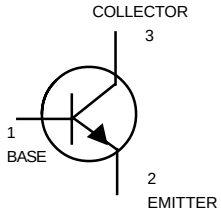
L2SC4617QT1G Series
S-L2SC4617QT1G Series



SC-89

- **Ordering information**

Device	Marking	Shipping
L2SC4617QT1G	BQ	3000 Tape & Reel
L2SC4617QT3G	BQ	10000 Tape & Reel
L2SC4617RT1G	BR	3000 Tape & Reel
L2SC4617RT3G	BR	10000 Tape & Reel
L2SC4617ST1G	BS	3000 Tape & Reel
L2SC4617ST3G	BS	10000 Tape & Reel



- **Absolute maximum ratings** (Ta=25°C)

Parameter	Symbol	Limits	Unit
Collector-base voltage	V_{CBO}	60	V
Collector-emitter voltage	V_{CEO}	50	V
Emitter-base voltage	V_{EBO}	7	V
Collector current	I_C	0.15	A
Total device dissipation,T_A= 25°C Derate above 25°C	P_D	0.15 1.2	W mW/°C
Thermal Resistance Junction-to-Ambient	$R_{\theta JA}$	833	°C/W
Junction temperature	Tj	150	˚C
Storage temperature	Tstg	−55~+150	˚C

- **Electrical characteristics** (Ta=25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Collector-base breakdown voltage	BV_{CBO}	60	–	–	V	I_C=50μA
Collector-emitter breakdown voltage	BV_{CEO}	50	–	–	V	I_C=1mA
Emitter-base breakdown voltage	BV_{EBO}	7	–	–	V	I_E=50μA
Collector cutoff current	I_{CBO}	–	–	0.1	μA	V_{CB}=60V
Emitter cutoff current	I_{EBO}	–	–	0.1	μA	V_{EB}=7V
Collector-emitter saturation voltage	$V_{CE(sat)}$	–	–	0.5	V	I_C/I_B=50mA/5mA
DC current transfer ratio	h_{FE}	120	–	560	–	V_{CE}=6V, I_C=1mA
Transition frequency	f_T	–	180	–	MHz	V_{CE}=12V, I_E=2mA, f=30MHz
Output capacitance	Cob	–	2.0	3.5	pF	V_{CB}=12V, I_E=0A, f=1MHz

- h_{FE} values are classified as follows:

Item	Q	R	S
h_{FE}	120~270	180~390	270~560

L2SC4617QT1G Series,S-L2SC4617QT1G Series

ELECTRICAL CHARACTERISTIC CURVES

(Ta = 25°C)

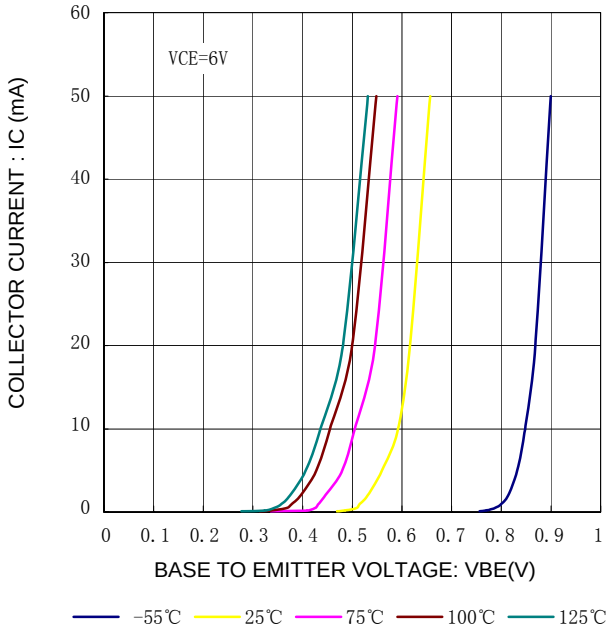


Fig.1 GROUNDED EMITTER PROPAGATION CHARACTERISTICS

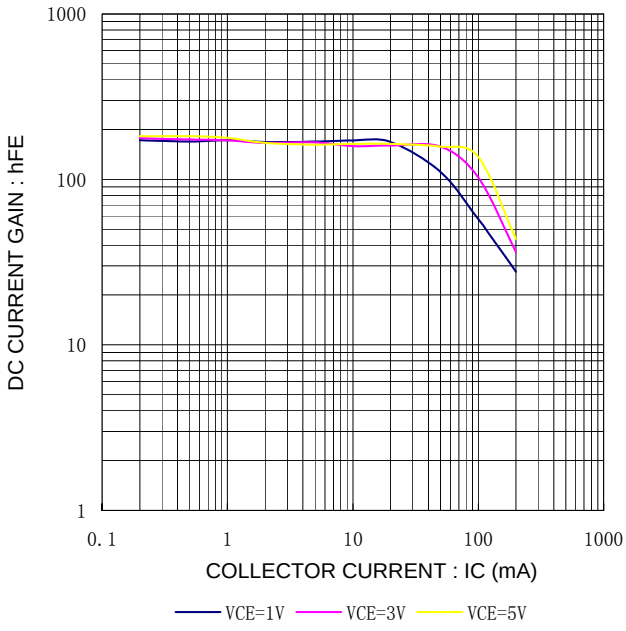


Fig.2 DC CURRENT GAIN VS.COLLECTOR CURRENT(1)

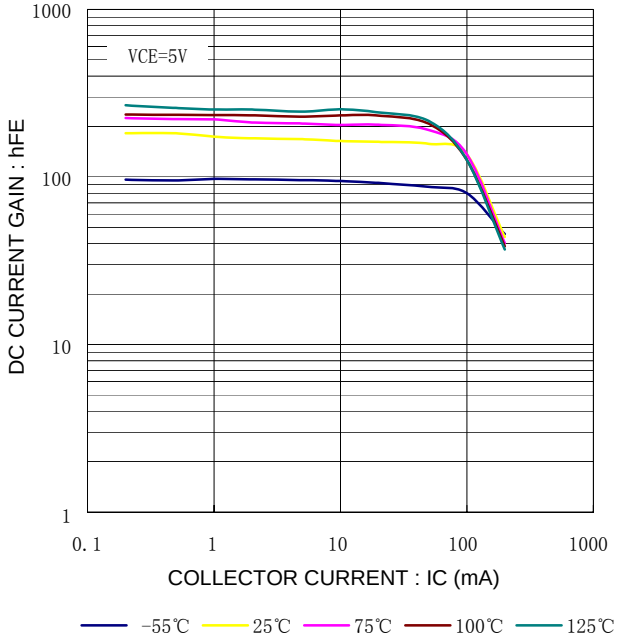


Fig.3 DC CURRENT GAIN VS.COLLECTOR CURRENT(2)

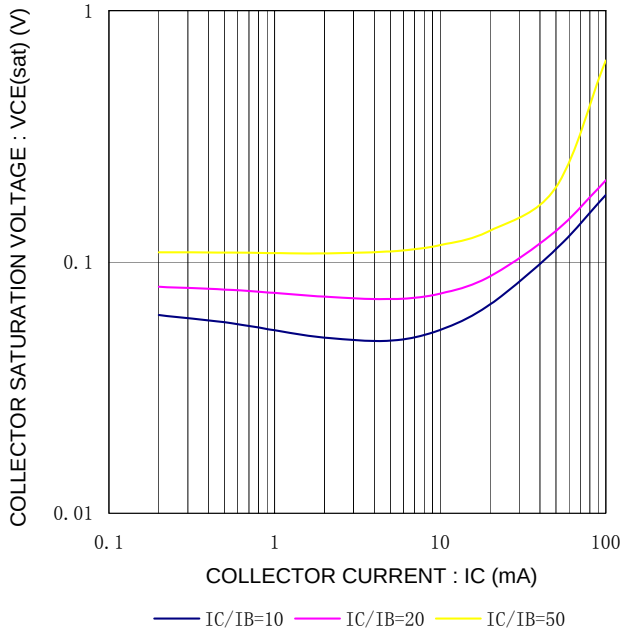


Fig.4 COLLECTOR-EMITTER SATURATION VOLTAGE VS.COLLECTOR CURRENT

ELECTRICAL CHARACTERISTIC CURVES

(Ta = 25°C)

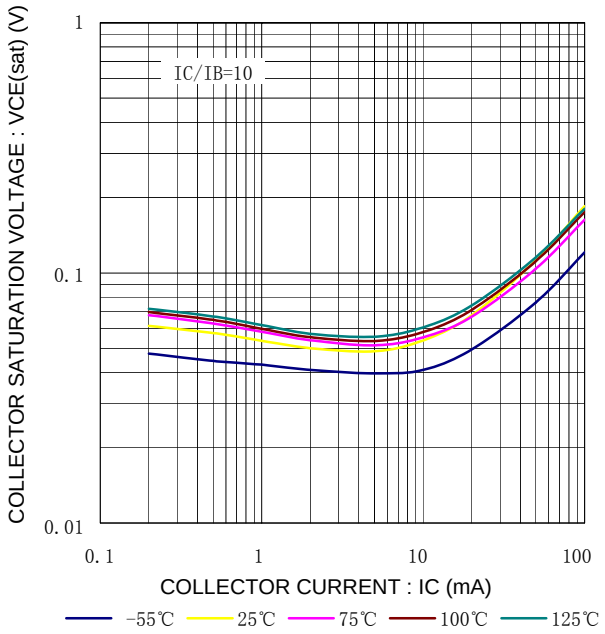


Fig.5 COLLECTOR-EMITTER SATURATION VOLTAGE VS.COLLECTOR CURRENT(1)

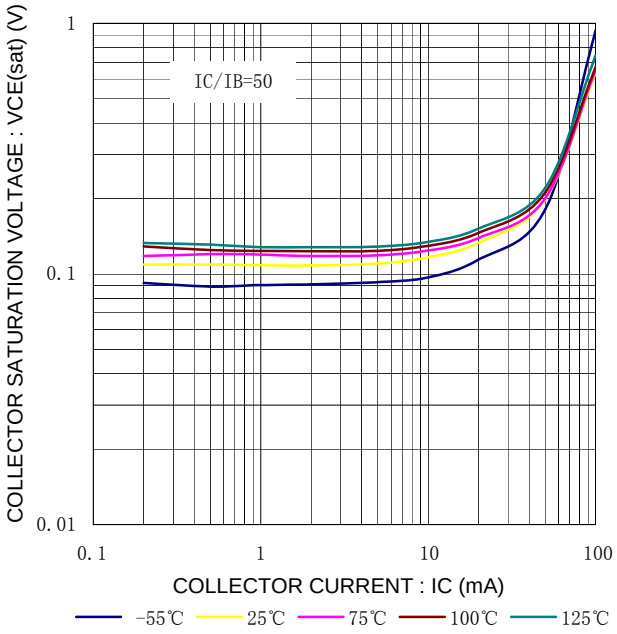


Fig.6 COLLECTOR-EMITTER SATURATION VOLTAGE VS.COLLECTOR CURRENT(2)

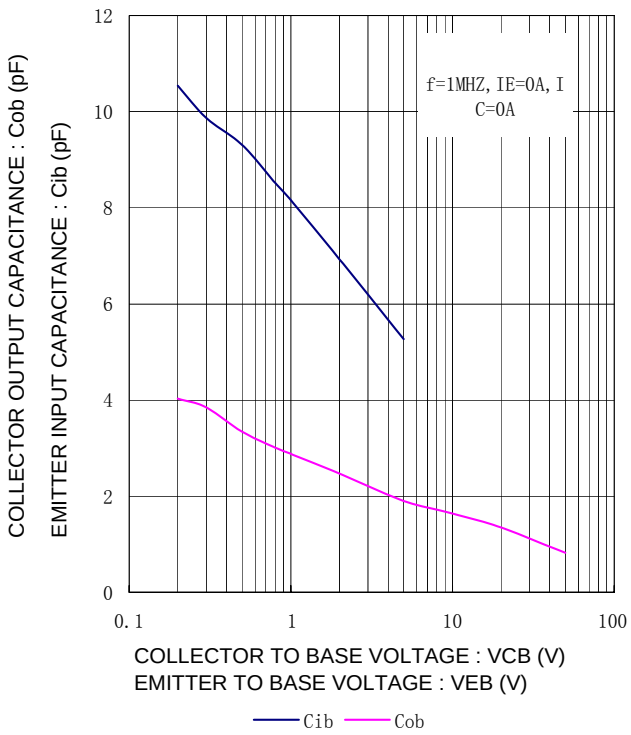


Fig.7 COLLECTOR OUTPUT CAPACITANCE VS. COLLECTOR-BASE VOLTAGE
EMITTER INPUT CAPACITANCE VS. EMITTER-BASE VOLTAGE

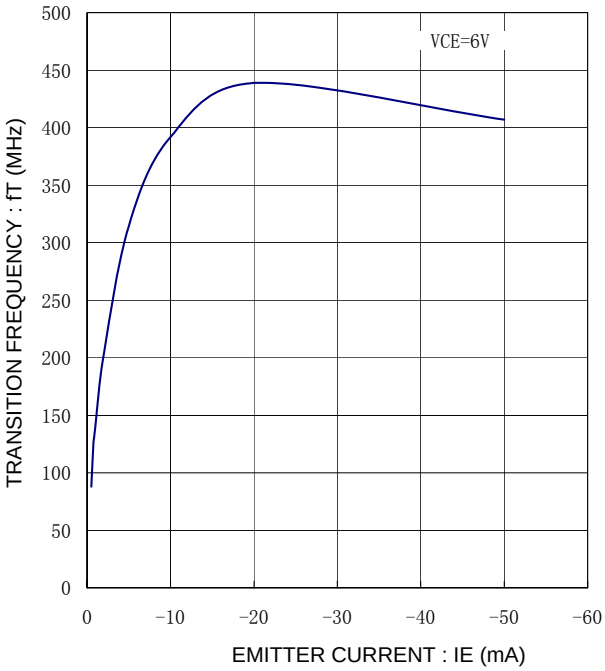
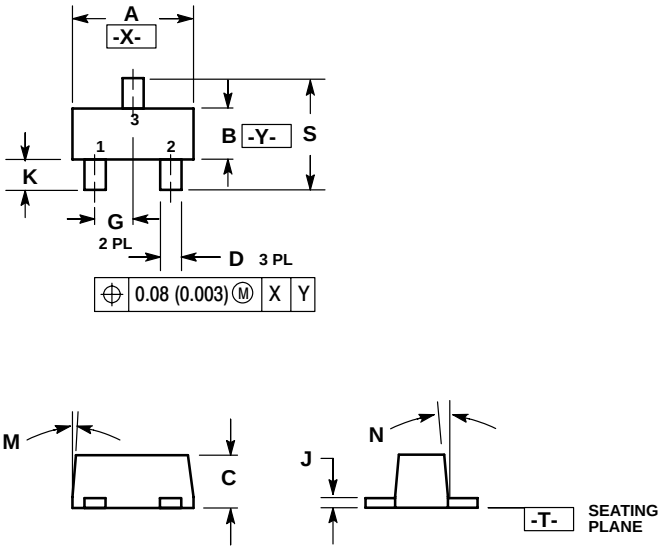


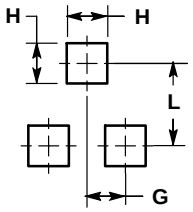
Fig.8 GAIN BANDWIDTH PRODUCT VS. EMITTER CURRENT

SC−89



NOTES:
1. DIMENSIONING AND TOLERANCING PER ANSI Y14.5M, 1982.
2. CONTROLLING DIMENSION: MILLIMETERS
3. MAXIMUM LEAD THICKNESS INCLUDES LEAD FINISH THICKNESS. MINIMUM LEAD THICKNESS IS THE MINIMUM THICKNESS OF BASE MATERIAL.
4. 463C-01 OBSOLETE, NEW STANDARD 463C-02.

	MILLIMETERS			INCHES		
DIM	MIN	NOM	MAX	MIN	NOM	MAX
A	1.50	1.60	1.70	0.059	0.063	0.067
B	0.75	0.85	0.95	0.030	0.034	0.040
C	0.60	0.70	0.80	0.024	0.028	0.031
D	0.23	0.28	0.33	0.009	0.011	0.013
G		0.50 BSC			0.020 BSC	
H		0.53 REF			0.021 REF	
J	0.10	0.15	0.20	0.004	0.006	0.008
K	0.30	0.40	0.50	0.012	0.016	0.020
L		1.10 REF			0.043 REF	
M	---	---	10 °	---	---	10 °
N	---	---	10 °	---	---	10 °
S	1.50	1.60	1.70	0.059	0.063	0.067



RECOMMENDED PATTERN OF SOLDER PADS

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 :

619691C MCH4017-TL-H MMBT-2369-TR BC546/116 BC557/116 BSW67A NJVMJD148T4G NTE123AP-10 NTE153MCP NTE16 NTE195A NTE92 2N4401-A 2N6728 2SA1419T-TD-H 2SA2126-E 2SB1204S-TL-E 2SC2712S-GR,LF 2SC4731T-AY FJPF5304DTU 2N2907A 2N3904-NS 2N5769 2SB1324-TD-E 2SC2412KT146S 2SC3332T 2SC3902S 2SC5231C8-TL-E 2SD1685F CPH6501-TL-E MCH4021-TL-E MJE340 Jantx2N5416 US6T6TR NJL0281DG 732314D CPH3121-TL-E CPH6021-TL-H 873787E IMZ2AT108 UMX21NTR MCH6102-TL-E NJL0302DG TTA1452B,S4X(S 2N3879 NTE13 NTE26 NTE282 NTE323 NTE350