

General Purpose Transistors

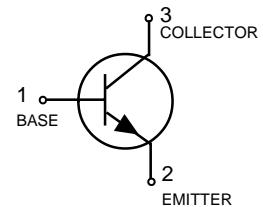
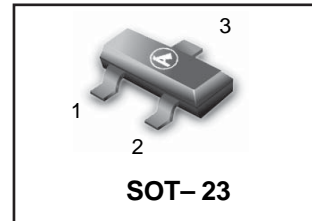
Pb-Free package is available

S- Prefix for Automotive and Other Applications Requiring Unique Site and Control Change Requirements; AEC-Q101 Qualified and PPAP Capable.

L2SC1623QLT1G
Series
S-L2SC1623QLT1G
Series

DEVICE MARKING AND ORDERING INFORMATION

| Device | Marking | Shipping |
|----------------------------------|---------|-----------------|
| L2SC1623QLT1G S-L2SC1623QLT1G | L5 | 3000/Tape&Reel |
| L2SC1623QLT3G S-L2SC1623QLT3G | L5 | 10000/Tape&Reel |
| L2SC1623RLT1G S-L2SC1623RLT1G | L6 | 3000/Tape&Reel |
| L2SC1623RLT3G S-L2SC1623RLT3G | L6 | 10000/Tape&Reel |
| L2SC1623SLT1G S-L2SC1623SLT1G | L7 | 3000/Tape&Reel |
| L2SC1623SLT3G S-L2SC1623SLT3G | L7 | 10000/Tape&Reel |



MAXIMUM RATINGS

| Rating | Symbol | Value | Unit |
|------------------------------|-----------|-------|------|
| Collector-Emitter Voltage | V_{CEO} | 50 | V |
| Collector-Base Voltage | V_{CBO} | 60 | V |
| Emitter-Base Voltage | V_{EBO} | 7 | V |
| Collector current-continuoun | I_C | 150 | mAdc |

THERMAL CHARATEERISTICS

| 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 | $^{\circ}C$ |

DEVICE MARKING

L2SC1623QLT1G=L5 L2SC1623RLT1G=L6 L2SC1623SLT1G=L7

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

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

OFF CHARACTERISTICS

| | | | | | |
|---|-----------|---|---|-----|---------|
| Collector Cutoff Current ($V_{CB}=60V$) | I_{CBO} | - | - | 0.1 | μA |
| Emitter Cutoff Current ($V_{BE}=5V$) | I_{EBO} | - | - | 0.1 | μA |

L2SC1623QLT1G
Series
S-L2SC1623QLT1G
Series

ON CHARACTERISTICS

| | | | | | |
|--|---------------|------|------|------|---|
| DC Current Gain ($I_C=1.0\text{mA}$, $V_{CE}=6\text{V}$) | h_{FE} | 120 | - | 560 | |
| Collector-Emitter Saturation Voltage ($I_C=100\text{mA}$, $I_B=10\text{mA}$) | $V_{CE(sat)}$ | - | 0.15 | 0.3 | V |
| Base-Emitter Saturation Voltage ($I_C=100\text{mA}$, $I_B=10\text{mA}$) | $V_{BE(sat)}$ | - | 0.86 | 1.0 | V |
| Base -Emitter On Voltage ($I_C=1\text{mA}$, $V_{CE}=6.0\text{V}$) | V_{BE} | 0.55 | 0.62 | 0.65 | V |

SMALL-SIGNAL CHARACTERISTICS

| | | | | | |
|---|----------|---|-----|---|-----|
| Current-Gain-Bandwidth Product ($V_{CE}=6.0\text{V}$, $I_E=-10\text{mA}$) | F_t | - | 250 | - | MHz |
| Output Capacitance($V_{CE}=6\text{V}$, $I_E=0$, $f=1.0\text{MHz}$) | C_{ob} | - | 3 | - | Pf |

h_{FE} Values are classified as follows

NOTE:

| | | | |
|----------|---------|---------|---------|
| * | Q | R | S |
| h_{FE} | 120~270 | 180~390 | 270~560 |

L2SC1623QLT1G
Series
S-L2SC1623QLT1G
Series

Fig.1 Grounded emitter propagation characteristics

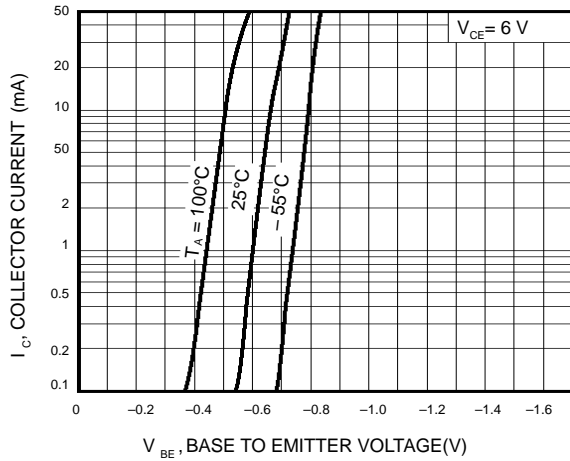


Fig.2 Grounded emitter output characteristics(I)

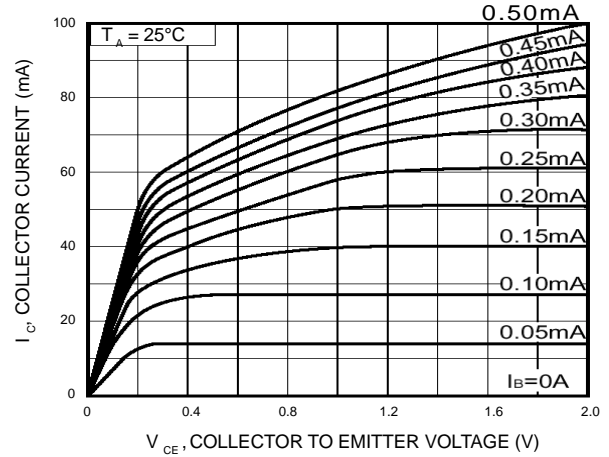


Fig.3 Grounded emitter output characteristics(II)

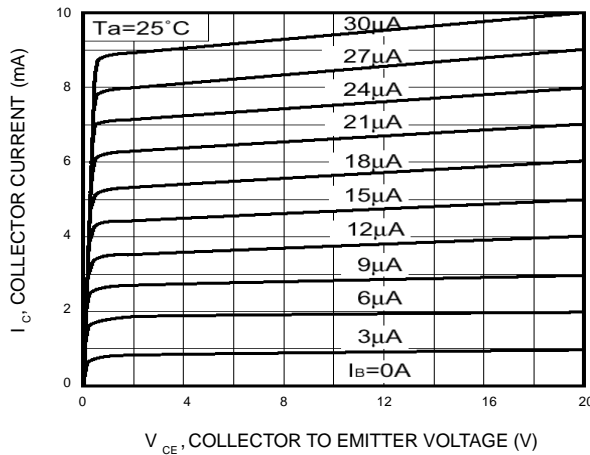


Fig.4 DC current gain vs. collector current (I)

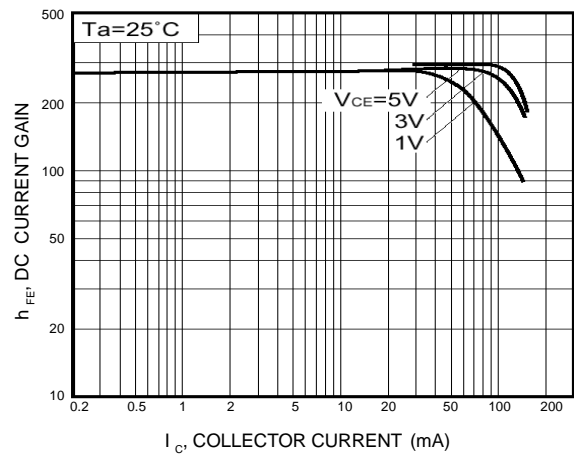


Fig.5 DC current gain vs. collector current (II)

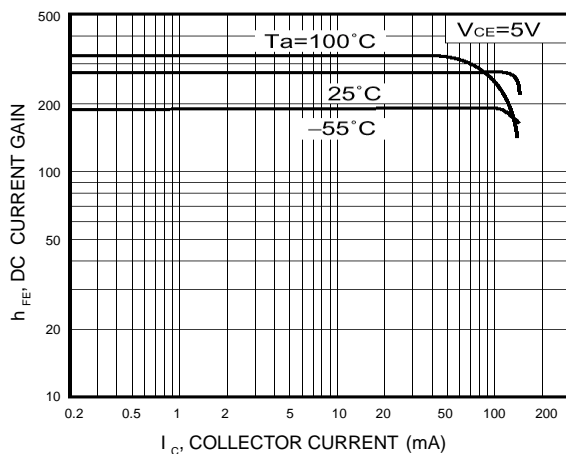
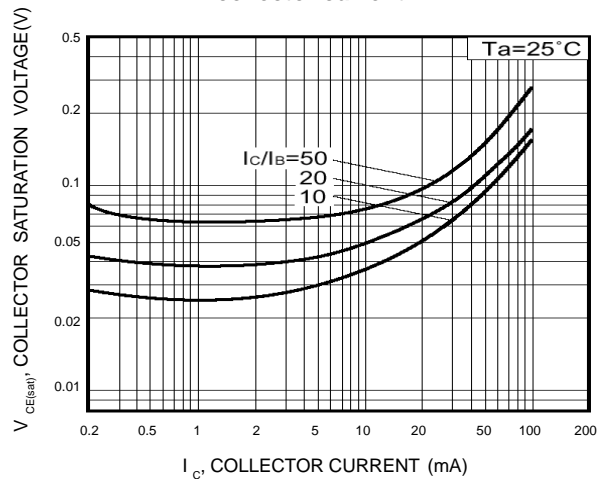


Fig.6 Collector-emitter saturation voltage vs. collector current



L2SC1623QLT1G
Series
S-L2SC1623QLT1G
Series

Fig.7 Collector-emitter saturation voltage vs. collector current (I)

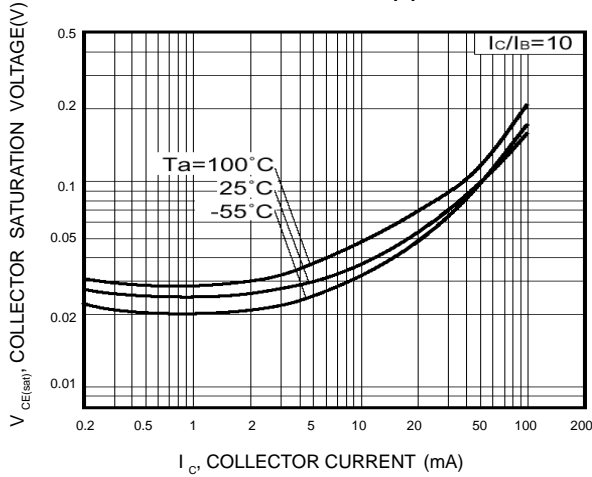


Fig.8 Collector-emitter saturation voltage vs. collector current (II)

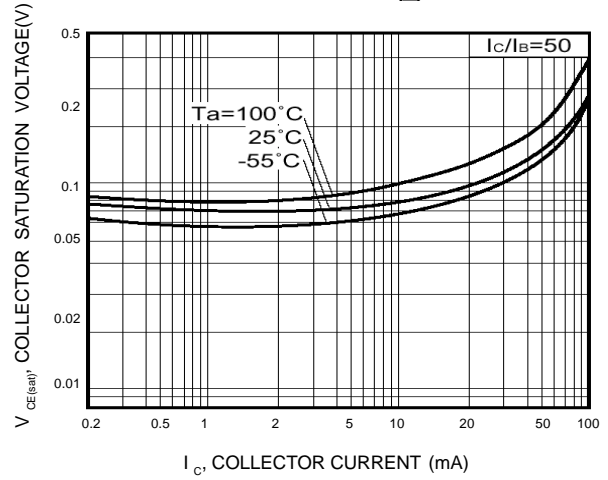


Fig.9 Gain bandwidth product vs. emitter current

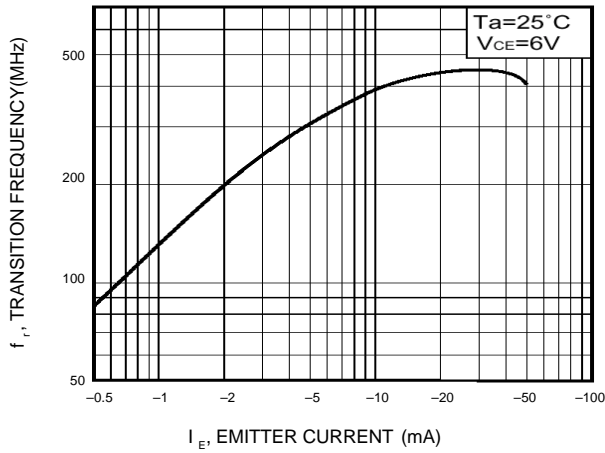


Fig.10 Collector output capacitance vs. collector-base voltage
Emitter input capacitance vs. emitter-base voltage

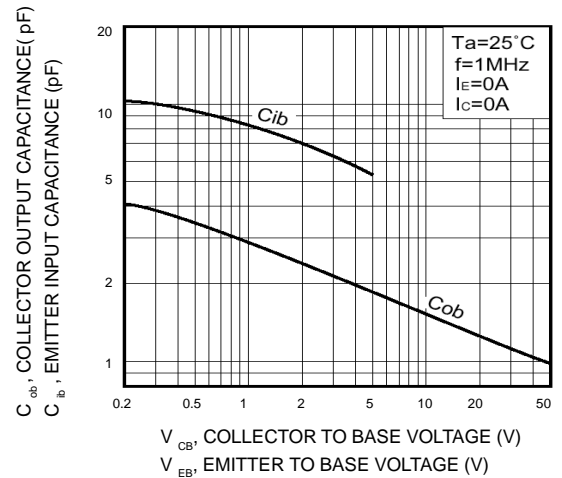
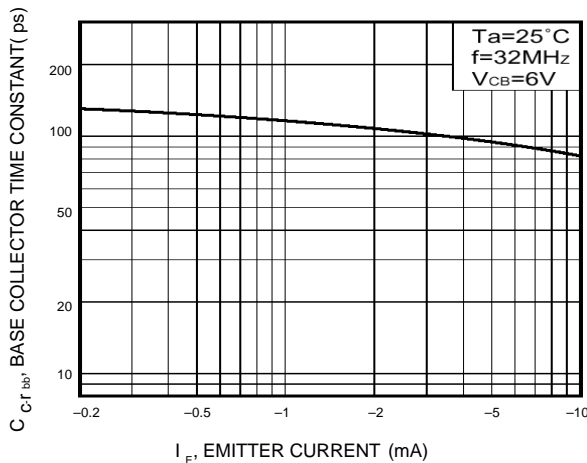
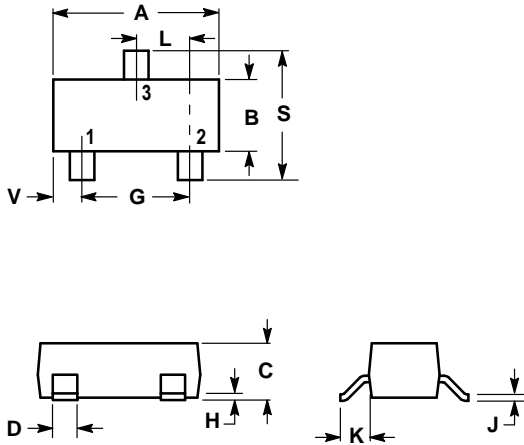


Fig.11 Base-collector time constant vs. emitter current



L2SC1623QLT1G
Series
S-L2SC1623QLT1G
Series

SOT-23

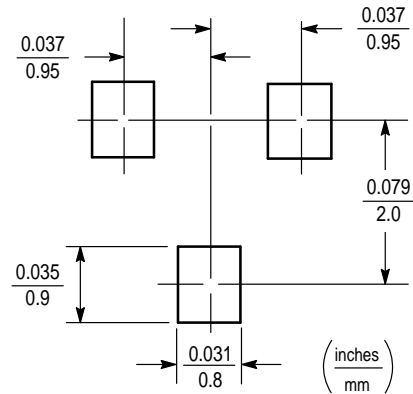


NOTES:

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



单击下面可查看定价，库存，交付和生命周期等信息

[>>LRC\(乐山无线电\)](#)