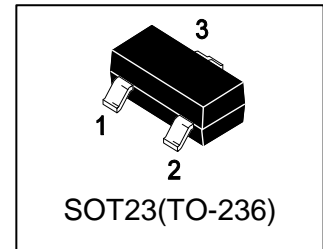


LMUN2233LT1G

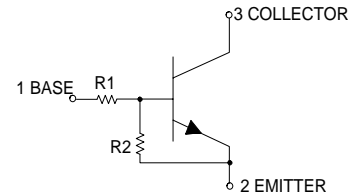
S-LMUN2233LT1G

Bias Resistor Transistor
NPN Silicon Surface Mount Transistor
with Monolithic Bias Resistor Network



1. FEATURES

- Simplifies circuit design
- Reduces board space and component count
- We declare that the material of product compliance with RoHS requirements and Halogen Free.
- S- prefix for automotive and other applications requiring unique site and control change requirements; AEC-Q101 qualified and PPAP capable.



2. DEVICE MARKING AND RESISTOR VALUES

| Device | Marking | R1(K) | R2(K) | Vin(V) | Shipping |
|--------------|---------|-------|-------|--------|----------------|
| LMUN2233LT1G | A8K | 4.7 | 47 | -5+30 | 3000/Tape&Reel |

3. MAXIMUM RATINGS(Ta = 25°C)

| Parameter | Symbol | Limits | Unit |
|--------------------------------|--------|--------|------|
| Collector–Emitter Voltage | VCEO | 50 | V |
| Collector–Base Voltage | VCBO | 50 | V |
| Collector Current — Continuous | IC | 100 | mA |

4. THERMAL CHARACTERISTICS

| Parameter | Symbol | Limits | Unit |
|---|---------|------------|-------------|
| Total Device Dissipation, FR-5 Board (Note 1) @ TA = 25°C Derate above 25°C | PD | 246 1.5 | mW mW/°C |
| Thermal Resistance, Junction–to–Ambient(Note 1) | RθJA | 508 | °C/W |
| Junction and Storage temperature | TJ,Tstg | -55~+150 | °C |

1. FR-5 @ Minimum Pad.

5. ELECTRICAL CHARACTERISTICS (Ta= 25°C)

OFF CHARACTERISTICS

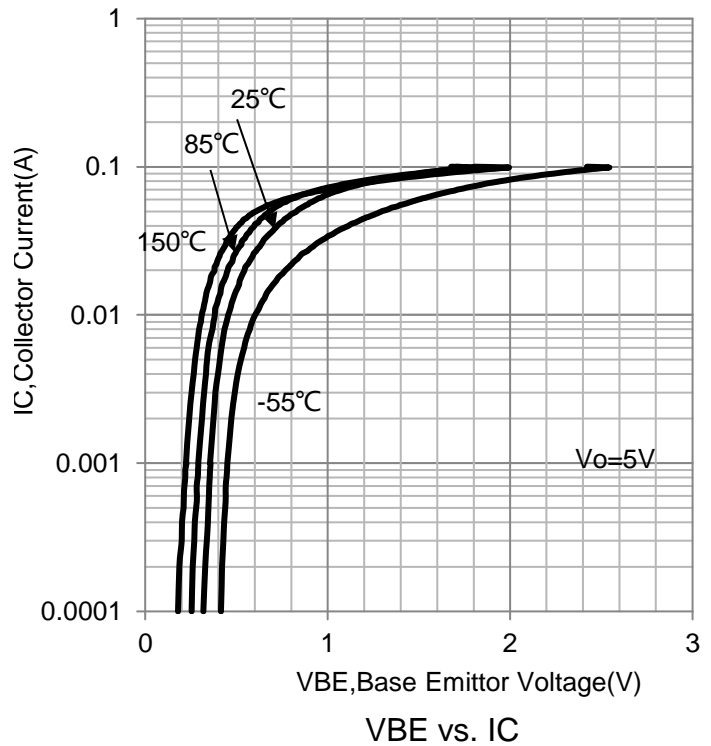
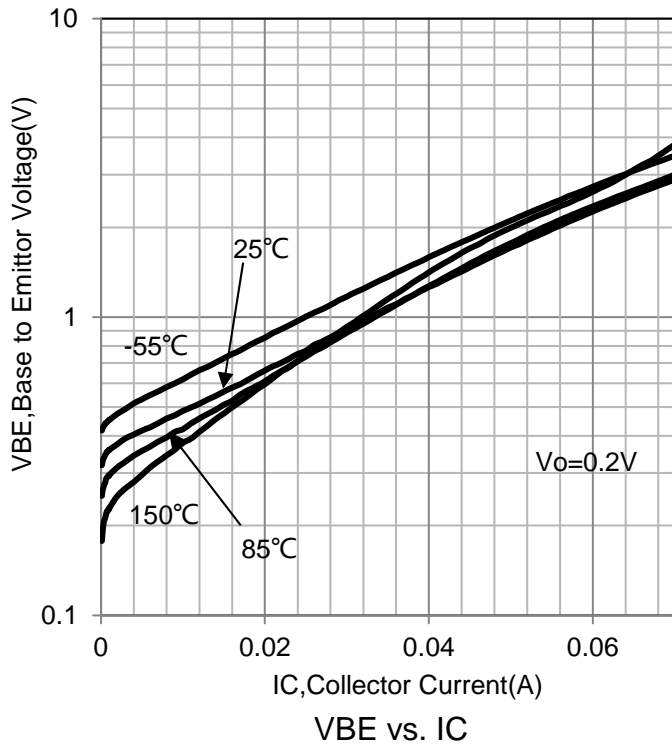
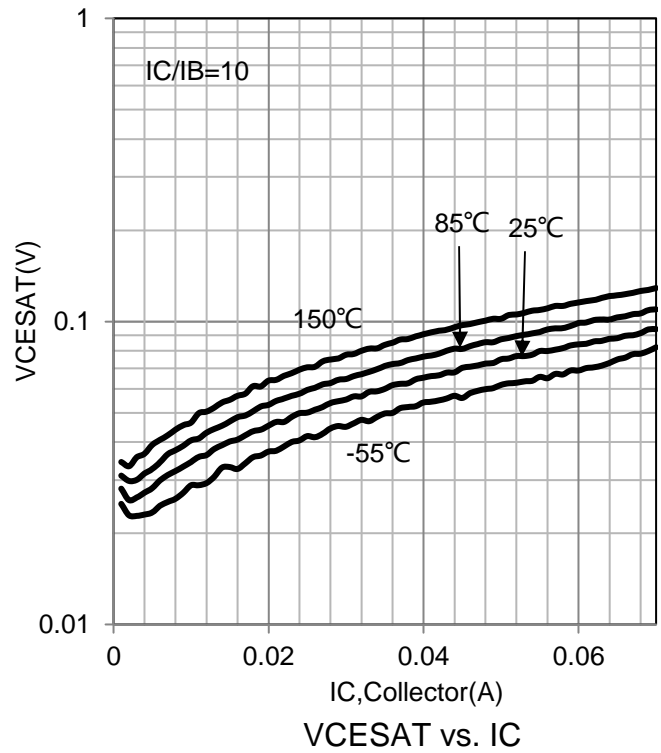
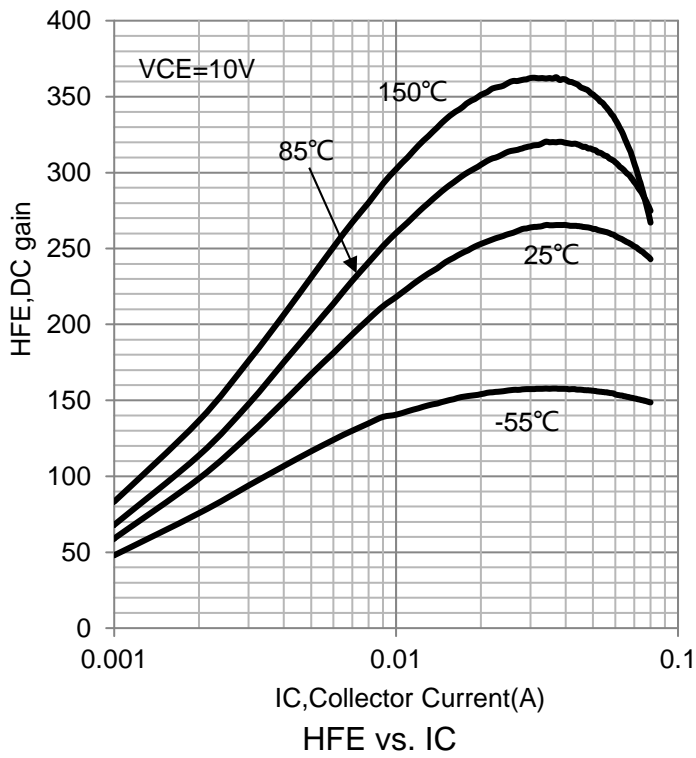
| Characteristic | Symbol | Min. | Typ. | Max. | Unit |
|--|----------|------|------|------|------|
| Collector–Emitter Breakdown Voltage (IC = 2.0 mA, IB = 0) | VBR(CEO) | 50 | - | - | V |
| Collector–Base Breakdown Voltage (IC = 10 μA, IE = 0) | VBR(CBO) | 50 | - | - | V |
| Collector-Base Cutoff Current (VCB = 50 V, IE = 0) | ICBO | - | - | 100 | nA |
| Collector-Emitter Cutoff Current (VCE = 50 V, IB = 0) | ICEO | - | - | 500 | nA |
| Emitter-Base Cutoff Current (VEB = 6.0 V, IC = 0) | IEBO | - | - | 0.18 | mA |

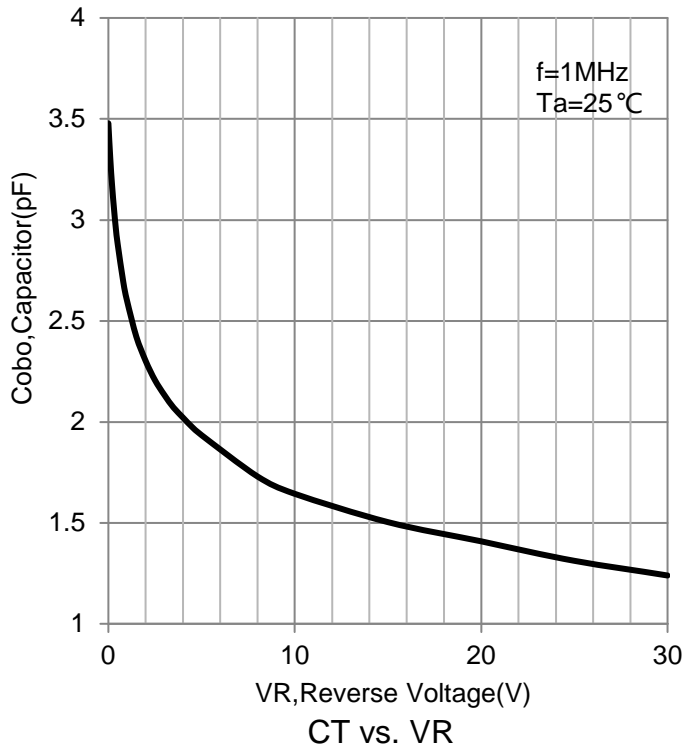
ON CHARACTERISTICS (Note 2.)

| | | | | | |
|---|----------|-------|-----|-------|----|
| DC Current Gain (IC = 5.0 mA, VCE = 10 V) | HFE | 80 | 200 | - | |
| Collector–Emitter Saturation Voltage (IC = 10 mA, IB = 1 mA) | VCE(sat) | - | - | 0.25 | V |
| Output Voltage (on) (VCC = 5.0 V, VB = 2.5 V, RL = 1.0KΩ) | VOL | - | - | 0.2 | V |
| Output Voltage (on) (VCC = 5.0 V, VB = 0.25 V, RL = 1.0KΩ) | VOH | 4.9 | - | - | V |
| Input Resistor | R1 | 3.3 | 4.7 | 6.1 | KΩ |
| Resistor Ratio | R1/R2 | 0.055 | 0.1 | 0.185 | |
| Input Voltage (VCC = 5V, IO = 100μA) | VI(off) | - | - | 0.5 | V |
| Input Voltage (VO = 0.3V, IO = 10mA) | VI(on) | 3 | - | - | V |

2. Pulse Test: Pulse Width < 300 μs, Duty Cycle < 2.0%

6. ELECTRICAL CHARACTERISTICS CURVES

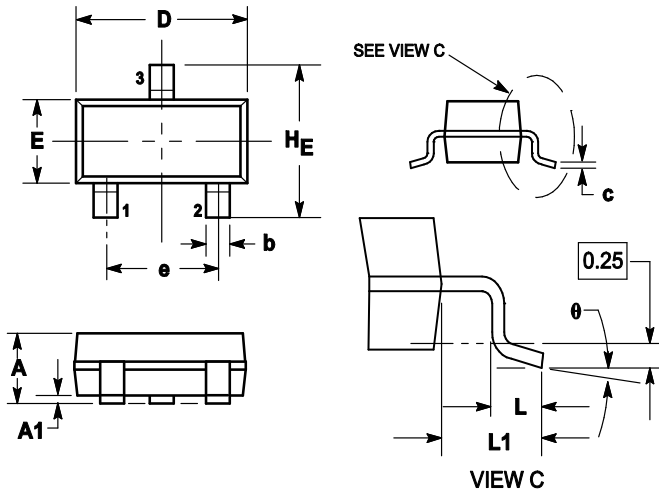


6. ELECTRICAL CHARACTERISTICS CURVES(Con.)

7. OUTLINE AND DIMENSIONS

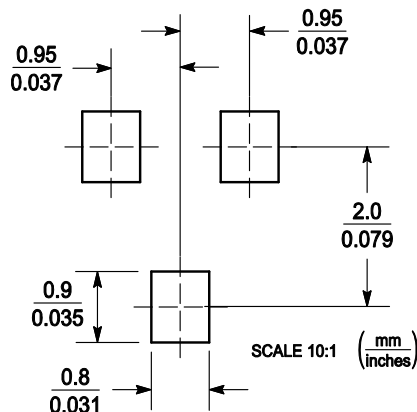
Notes:

1. DIMENSIONING AND TOLERANCING PER ANSI Y14.5M, 1982.
2. CONTROLLING DIMENSION: MILLIMETERS.
3. MAXIMUM LEAD THICKNESS INCLUDES LEAD FINISH. MINIMUM LEAD THICKNESS IS THE MINIMUM THICKNESS OF BASE MATERIAL.
4. DIMENSIONS D AND E DO NOT INCLUDE MOLD FLASH, PROTRUSIONS OR GATE BURRS.



| DIM | MILLIMETERS | | | INCHES | | |
|-------|-------------|------|------|--------|-------|-------|
| | MIN | NOM | MAX | MIN | NOM | MAX |
| A | 0.89 | 1 | 1.11 | 0.035 | 0.04 | 0.044 |
| A1 | 0.01 | 0.06 | 0.1 | 0.001 | 0.002 | 0.004 |
| b | 0.37 | 0.44 | 0.5 | 0.015 | 0.018 | 0.02 |
| c | 0.09 | 0.13 | 0.18 | 0.003 | 0.005 | 0.007 |
| D | 2.80 | 2.9 | 3.04 | 0.11 | 0.114 | 0.12 |
| E | 1.20 | 1.3 | 1.4 | 0.047 | 0.051 | 0.055 |
| e | 1.78 | 1.9 | 2.04 | 0.07 | 0.075 | 0.081 |
| L | 0.10 | 0.2 | 0.3 | 0.004 | 0.008 | 0.012 |
| L1 | 0.35 | 0.54 | 0.69 | 0.014 | 0.021 | 0.029 |
| HE | 2.10 | 2.4 | 2.64 | 0.083 | 0.094 | 0.104 |
| theta | 0° | --- | 10° | 0° | --- | 10° |

8. SOLDERING FOOTPRINT



单击下面可查看定价，库存，交付和生命周期等信息

[>>LRC\(乐山无线电\)](#)