

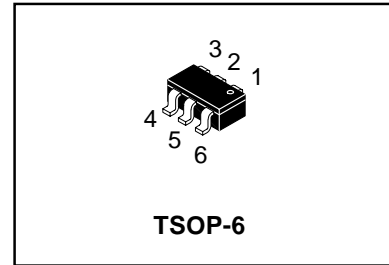
High Current Surface Mount PNP Silicon Switching Transistor for Load Management in Portable Applications

• We declare that the material of product compliance with RoHS requirements.

LMBT35200MT1G

ORDERING INFORMATION

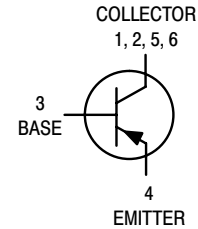
| Device | Marking | Shipping |
|---------------|---------|-------------------|
| LMBT35200MT1G | G4 | 3000/Tape & Reel |
| LMBT35200MT3G | G4 | 10000/Tape & Reel |



ABSOLUTE MAXIMUM RATINGS (Ta=25°C)

| ITEM | SYMBOL | RATINGS | UNIT |
|-------------------------------------|--------|------------|------|
| COLLECTOR-BASE VOLTAGE | VCBO | -80 | V |
| COLLECTOR-EMITTER VOLTAGE | VCEO | -60 | V |
| EMITTER-BASE VOLTAGE | VEBO | -5 | V |
| COLLECTOR CURRENT(DC) | IC | -3 | A |
| COLLECTOR CURRENT(Pulse) | ICP | -6 | A |
| COLLECTOR POWER DISSIPATION(Note.1) | PC | 625 | mW |
| JUNCTION TEMPERATURE | Tj | 150 | °C |
| STORAGE TEMPERATURE | Tstg | -55 to 150 | °C |
| THERMAL RESISTANCE(Note1.) | Rja | 200 | °C/W |

1.FR-4@Minimum Pad

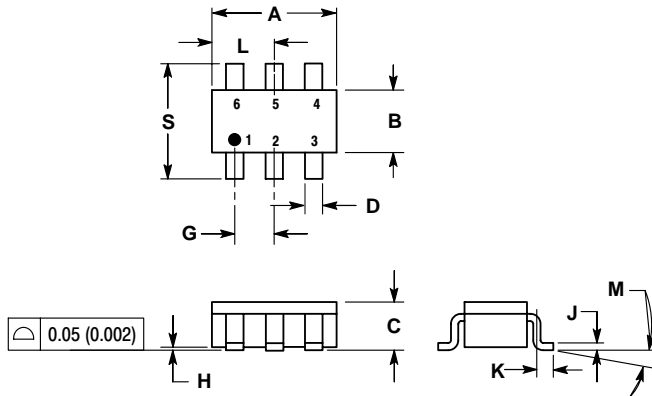


ELECTRICAL CHARACTERISTICS (Ta=25°C)

| ITEM | SYMBOL | MIN. | TYP. | MAX. | UNIT | CONDITIONS |
|-------------------------------------|------------|------|-------|-------|------|----------------------------|
| COLLECTOR-BASE BREAKDOWN VOLTAGE | BVCBO | -80 | - | - | V | IC= -100uA, IE= 0A |
| COLLECTOR-EMITTER BREAKDOWN VOLTAGE | BVCEO | -60 | - | - | V | IC= -10mA, IB= 0A |
| EMITTER-BASE BREAKDOWN VOLTAGE | BVEBO | -5 | - | - | V | IE= -100uA, IC= 0A |
| COLLECTOR CUTOFF CURRENT | ICBO | - | - | -100 | nA | VCB= -60V, IE= 0A |
| EMITTER CUTOFF CURRENT | IEBO | - | - | -100 | nA | VEB= -4V, IC= 0A |
| DC CURRENT GAIN 1 | hFE 1 | 70 | 200 | - | - | VCE= -2V, IC= -50mA |
| DC CURRENT GAIN 2 | hFE 2 | 100 | 200 | 300 | - | VCE= -2V, IC= -500mA |
| DC CURRENT GAIN 3 | hFE 3 | 80 | 170 | - | - | VCE= -2V, IC= -1A |
| DC CURRENT GAIN 4 | hFE 4 | 40 | 150 | - | - | VCE= -2V, IC= -2A |
| COLLECTOR SATURATION VOLTAGE 1 | VCE(sat) 1 | - | -0.15 | -0.3 | V | IC= -1A, IB= -100mA |
| COLLECTOR SATURATION VOLTAGE 2 | VCE(sat) 2 | - | -0.45 | -0.6 | V | IC= -3A, IB= -300mA |
| BASE SATURATION VOLTAGE | VBE(sat) | - | -0.9 | -1.25 | V | IC= -1A, IB= -100mA |
| BASE-EMITTER ON VOLTAGE | VBE(on) | - | -0.8 | -1 | V | VCE= -2V, IC= -1A |
| TRANSITION FREQUENCY(*1) | fT | 100 | 140 | - | MHz | VCE= -5V, IE= 100mA |
| COLLECTOR OUTPUT CAPACITANCE(*1) | Cob | - | - | 30 | pF | VCB= -10V, f= 1MHz, IE= 0A |
| TURN ON TIME(*1) | ton | - | 40 | - | ns | VCC= -10V, IC= -500mA |
| TURN OFF TIME(*1) | toff | - | 450 | - | ns | -IB1= IB2= 50mA |

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TSOP-6



- NOTES:
1. DIMENSIONING AND TOLERANCING PER ANSI Y14.5M, 1982.
 2. CONTROLLING DIMENSION: MILLIMETER.
 3. MAXIMUM LEAD THICKNESS INCLUDES LEAD FINISH THICKNESS. MINIMUM LEAD THICKNESS IS THE MINIMUM THICKNESS OF BASE MATERIAL.

| DIM | MILLIMETERS | | INCHES | |
|-----|-------------|-------|--------|--------|
| | MIN | MAX | MIN | MAX |
| A | 2.90 | 3.10 | 0.1142 | 0.1220 |
| B | 1.30 | 1.70 | 0.0512 | 0.0669 |
| C | 0.90 | 1.10 | 0.0354 | 0.0433 |
| D | 0.25 | 0.50 | 0.0098 | 0.0197 |
| G | 0.85 | 1.05 | 0.0335 | 0.0413 |
| H | 0.013 | 0.100 | 0.0005 | 0.0040 |
| J | 0.10 | 0.26 | 0.0040 | 0.0102 |
| K | 0.20 | 0.60 | 0.0079 | 0.0236 |
| L | 1.25 | 1.55 | 0.0493 | 0.0610 |
| M | 0° | 10° | 0° | 10° |
| S | 2.50 | 3.00 | 0.0985 | 0.1181 |

- STYLE 6:
- PIN 1. COLLECTOR
 - COLLECTOR
 - BASE
 - EMITTER
 - COLLECTOR
 - COLLECTOR