

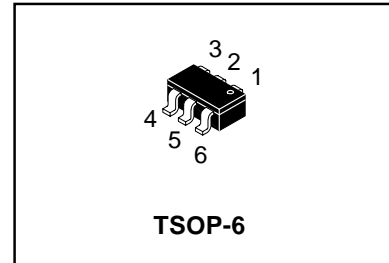
# High Current Surface Mount PNP Silicon Switching Transistor for Load Management in Portable Applications

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

**LMBT35200MT1G**

## ORDERING INFORMATION

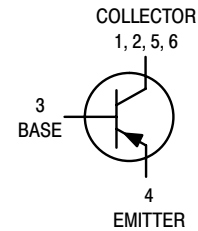
Device	Marking	Shipping
LMBT35200MT1G	G4	3000/Tape & Reel
LMBT35200MT3G	G4	10000/Tape & Reel



## ABSOLUTE MAXIMUM RATINGS (Ta=25°C)

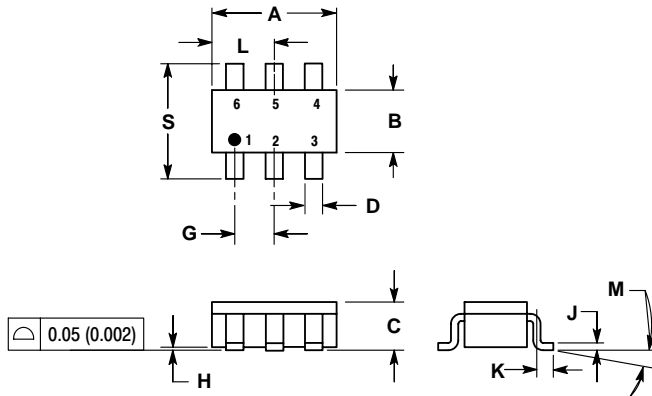
ITEM	SYMBOL	RATINGS	UNIT
COLLECTOR-BASE VOLTAGE	VCBO	-80	V
COLLECTOR-EMITTER VOLTAGE	VCEO	-60	V
EMITTER-BASE VOLTAGE	VEBO	-5	V
COLLECTOR CURRENT(DC)	IC	-3	A
COLLECTOR CURRENT(Pulse)	ICP	-6	A
COLLECTOR POWER DISSIPATION(Note.1)	PC	625	mW
JUNCTION TEMPERATURE	Tj	150	°C
STORAGE TEMPERATURE	Tstg	-55 to 150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

**LMBT35200MT1G**
**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
2. COLLECTOR
3. BASE
4. EMITTER
5. COLLECTOR
6. COLLECTOR