PNP General Purpose Amplifier Transistor Surface Mount

LMSB709LT1

SOT-23

FEATURE

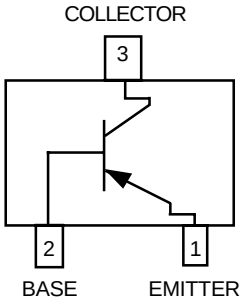
- Small plastic SMD package.
- General purpose amplification.
- Pb-Free Package is available.

DEVICE MARKING AND ORDERING INFORMATION

Device	Marking	Shipping
LMSB709LT1	AR	3000/Tape&Reel
LMSB709LT1G	AR (Pb-Free)	3000/Tape&Reel

MAXIMUM RATINGS (T_A = 25 °C)

Rating	Symbol	Value	Unit
Collector-Base Voltage	$V_{(BR)CBO}$	–60	Vdc
Collector-Emitter Voltage	$V_{(BR)CEO}$	–45	Vdc
Emitter-Base Voltage	$V_{(BR)EBO}$	–7.0	Vdc
Collector Current - Continuous	I_C	–100	mAdc
Collector Current - Peak	$I_{C(P)}$	–200	mAdc



THERMAL CHARACTERISTICS

Characteristic	Symbol	Max	Unit
Power Dissipation	P_D	200	mW
Junction Temperature	T_J	150	℃
Storage Temperature	T_{stg}	–55 ~ +150	℃

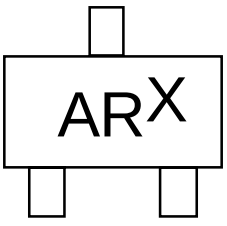
ELECTRICAL CHARACTERISTICS (T_A = 25 °C)

Characteristic	Symbol	Min	Max	Unit
Collector-Emitter Breakdown Voltage (I_C=–2.0mAdc,I_B=0)	$V_{(BR)CEO}$	–45	—	Vdc
Collector-Base Breakdown Voltage (I_C=–10μAdc,I_E=0)	$V_{(BR)CBO}$	–60	—	Vdc
Emitter-Base Breakdown Voltage (I_E =–10μAdc,I_E=0)	$V_{(BR)EBO}$	–7.0	—	Vdc
Collector-Base Cutoff Current (V_{CB} =–45Vdc, I_E=0)	I_{CBO}	—	–0.1	μAdc
Collector-Emitter Cutoff Current (V_{CE}=–10Vdc, I_B=0)	I_{CEO}	—	–100	nAdc
DC Current Gain (1) (V_{CE}=–10Vdc, I_C = –2.0mAdc)	h_{FE1}	210	340	—
Collector-Emitter Saturation Voltage (I_C = –100mAdc, I_B=–10mAdc)	$V_{CE(sat)}$	—	–0.5	Vdc

1. Pulse Test: Pulse Width ≤ 300 μs, D.C. ≤ 2%.

DEVICE MARKING

Marking Symbol



The “X” represents a smaller alpha digit Date Code. The Date Code indicates the actual month in which the part was manufactured.

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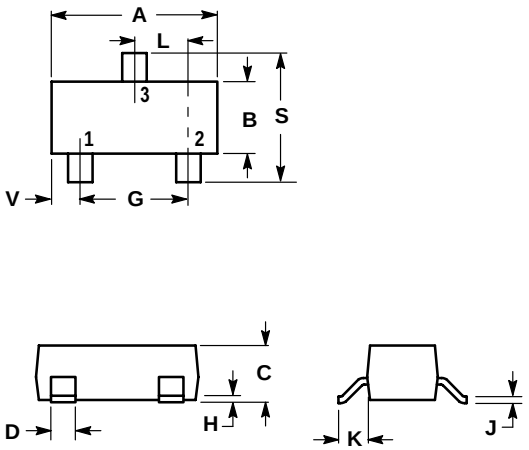

NOTES:
1. DIMENSIONING AND TOLERANCING PER ANSI Y14.5M, 1982.
2. CONTROLLING DIMENSION: INCH.

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