



# SOT89

Small Outline Transistor Package (SOT89)

## DESCRIPTION

Lingsen SOT-89 package is a lead frame based plastic encapsulated package with lead count 3, 5 and it is ideal for low cost packaging solutions. Lingsen is one of the largest providers of SOT in the world.

The package meets JEDEC Moisture Sensitivity Level 3 standard that ensures reliability in its functions.

## SPECIFICATIONS

- Die Thickness 635um (25mils) maximum
- Gold Wire 99.99% Au
- Mold Compound EME G600 (Green)  
EME 6300H (Non-Green)
- Plating Matte Tin
- Marking Laser Mark
- Packing Tape & Reel / Shielding Bag

## APPLICATIONS

- Wireless / RF
- Analog devices
- Ultra thin hand-held portable products such as cell phones, data storage systems, notebook computers and pagers

## RELIABILITY

- MSL Level: MSL 3 @ 240°C for Sn/Pb
- MSL Level: MSL 3 @ 260°C for Pb-Free & Green
- Pressure Cook Test: 168hrs (121°C, 100%RH, 2atm)
- Temperature Cycling: 500cycles (-65°C/+150°C)
- HAST: 100hrs (130°C, 85%RH)
- Temperature & Humidity Test: 1,000hrs (85°C, 85%RH)
- High Temperature Storage: 1,000hrs (150°C)

## FEATURES

- Available pin count 3L & 5L
- Lead pitch 1.5mm
- JEDEC standard compliant
- JEDEC MSL level 3 qualified for all pin counts

## PACKAGE AVAILABILITY

Package	Body Size (mm)	Pad Size (mm)	Die Size (mm)	Thermal Performance $\theta_{ja}$ (°C/W)
SOT-89 3L	4.49x2.48	2x1.6	1.21x1.21	39.94

Note: Simulated with JEDEC Standard 4-layer test board under still air condition, ambient temperature 45°C

### ELECTRICAL PERFORMANCE

Package	Body Size (mm)	Pad Size (mm)	Frequency (MHz)	Self Inductance (nH)	Self Capacitance (pF)	Resistance (mohm)
SOT-89 3L	4.49x2.48	2x1.6	100	0.65~3.95	0.705~1.733	67.2~95.4

Note: Results are simulated. Data is available through 2.5GHz.

### CROSS-SECTION

