



TSSOP

Thin-Shrink Small Outline Package

DESCRIPTION

TSSOP is a lead frame based plastic encapsulated package with gull wing shaped leads on two sides with lead count ranging from 8L to 56L leads. It is suitable for applications requiring a thin profile and ideal for low pin count analog and mixed signal devices in handheld applications such as PDAs and cellular phones.

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

SPECIFICATIONS

• Die Thickness	
Normal	228um (9mils) maximum
Power Pad	533um (21mils) maximum
• Gold Wire	99.99% Au
• Mold Compound	EME G700 (Green) EME 7372 (Non-Green)
• Plating	Matte Tin
• Marking	White Ink / Laser Mark
• Packing	Antistatic Tube

APPLICATIONS

- Analog and Operation Amplifiers
- Controllers and Drivers
- Logic, Memory and RF/Wireless
- Disk Drivers, Video / Audio and Consumer Appliances

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

- Body size 4.4mm and 6.1mm
- Available pin count from 8L to 56L
- Lead pitch 0.5mm and 0.65mm
- JEDEC standard compliant
- JEDEC MSL level 3 qualified for all pin counts

THERMAL PERFORMANCE

Package	Body Size (mm)	Pad Size (mm)	Die Size (mm)	Thermal Performance θ_{ja} (°C/W)
TSSOP 8L	4.4x3.05	2.6924x2.261	1.58x1.328	148.85

TSSOP 56L	6.1x14	2.54x5.08	2.045x2.27	67.42
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Note: Simulated with JEDEC Standard 4-layer test board under still air condition, ambient temperature 45°C

<i>ELECTRICAL PERFORMANCE</i>						
Package	Body Size (mm)	Pad Size (mm)	Frequency (MHz)	Self Inductance (nH)	Self Capacitance (pF)	Resistance (mohm)
TSSOP 8L	4.4x3.05	2.6924x2.261	100	1.289~2.476	0.272~0.367	37.09~129.4
TSSOP 56L	6.1x14	2.54x5.08	100	2.161~5.629	0.441~0.927	64.98~199.5

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

CROSS-SECTION

