



# CSP

Chip Scale Package

## DESCRIPTION

Lingsen CSP package is a ceramic substrate based plastic package with body thickness of only 0.65mm. It is available in pin count from 4 to higher pin counts based on the size of designed substrate. It is ideal to be used in the packaging of RF, wireless, portable as well as high-end networking and computing application products.

The package meets JEDEC Moisture Sensitivity Level 1 standard that ensures reliability in its functions.

## SPECIFICATIONS

• Die Thickness	100um (4mils) maximum
• Substrate	Ceramic Substrate
• Gold Wire	99.99% Au
• Mold Compound	Matsushita CV 8710J
• Plating	Au Plated for Soldering pad
• Marking	Laser Mark
• Packing	Bulk

## APPLICATIONS

- RF/ Wireless/ Portable Products
- Networking and Computing
- Application Products
- SDR / DDR
- Low Power SDRAMs

## RELIABILITY

MSL Level : MSL 1 @ 240°C

## FEATURES

- Low profile, 0.65mm height
- Package body size is flexible by substrate design
- JEDEC standard compliant
- JEDEC MSL level 1 qualified

## THERMAL PERFORMANCE

Package	Body Size (mm)	Pad Size (mm)	Die Size (mm)	Thermal Performance $\theta_{ja}$ (°C/W)
1412	1.42x1.18	0.65x0.6	0.442x0.373	357.2

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)
1412	1.42x1.18	0.65x0.6	100	0.17~0.58	0.11~0.20	13.07~51.75

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

### CROSS-SECTION

