



OTQFN

Open Top Quad Flat No-lead Package

DESCRIPTION

LINGSEN's Open Top Quad Flat No-lead (OTQFN) package is an exposed sensor/lighting area and plastic encapsulated package with exterior leads is around the bottom periphery of the package to provide short electrical connection to the PWB. The package also provides excellent thermal performance by having the die attach paddle exposed on the bottom of the package surface to provide efficient heat path when solder directly to the PWB.

APPLICATIONS

- Storage products
 - DVD Reader
 - Blue Ray DVD reader
- MEMS products
 - Pressure sensor
 - Motion sensor
 - Microphone
- Optical products
 - Ambient sensor
 - CMOS camera

SPECIFICATIONS

• Gold Wire	99.99% Au
• Mold Compound	G770(Green)
• Plating	Pre-plating (Ni/Pd/Au)
• Marking	Laser
• Packing	Antistatic Tube or Tray

DEFINITION

QFN (Quad Flat No-lead Package):

Exterior leads are around the bottom periphery of the package

V type: Package thickness is 0.9mm

RELIABILITY

MSL Level JEDEC Level 3 @ 260°C

FEATURES

- Reduce electrical parasitic
 - Driven by high frequency for telecom
- Lower thermal resistance
 - Small conventional packages typically have poor thermal performance
- Improved board space efficiency
 - Not necessary chip scale
- Reduced mounted height
- Reduced package mass
 - Handsets, PDAs

THERMAL PERFORMANCE

Package	Body Size (mm)	Pad Size (mm)	Die Size (mm)	Thermal Performance θ_{ja} ($^{\circ}\text{C}/\text{W}$)
VQFN 16L	4x4	2.79x2.79	2.120x2.120x0.36	38.3

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)
VQFN 16L	4x4	2.79x2.79	100	0.920~1.41	0.238~0.180	74.486~87.544

Note: Results are simulated. Data is available through 1GHz. Follow JEDEC standard 51-series.

CROSS-SECTION

