

iC-LTA optoBGA LSH2C

OPTO ENCODER PACKAGE SPECIFICATION



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ORDERING INFORMATION

Type	Package	Options	Order Designation
iC-LTA	oBGA LSH2C	reticle	iC-LTA oBGA LSH2C -xxR
		glass lid	iC-LTA oBGA LSH2C

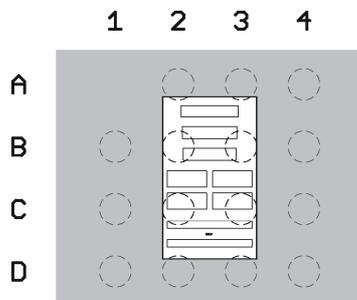


6.2 mm x 5.2 mm
RoHS compliant

PIN CONFIGURATION

PIN FUNCTIONS

(top view)



No. Name Function

A2
A3
A4
B1
B2
B3
B4
C1
C2
C3
C4
D1
D2
D3
D4

For pinout information please refer to the relevant IC data sheets.

ABSOLUTE MAXIMUM RATINGS

Item	Symbol	Parameter	Conditions	Fig.				Unit
					Min.	Typ.	Max.	
TG1	Ta	Operating Ambient Temperature Range			- 40		110	°C
TG2	Ts	Storage Temperature Range			- 40		110	°C
TG3	Tpk	Reflow Soldering Peak Temperature	tpk < 20 s, convection reflow tpk < 20 s, vapour phase TOL (time on label) 8 h; please refer to customer information file No. 7 for details				245 230	°C °C

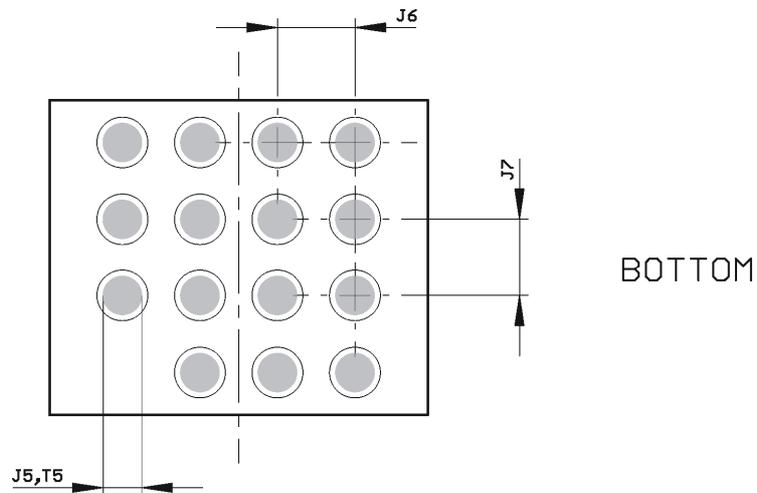
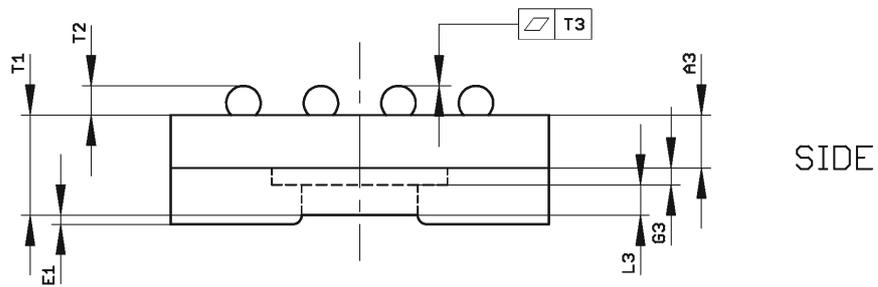
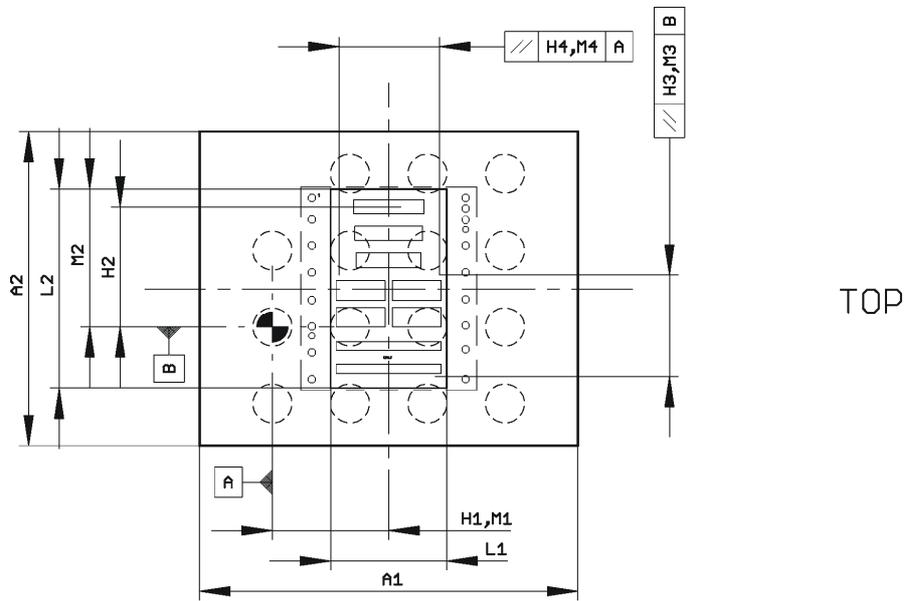
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PHYSICAL DIMENSIONS



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DIMENSION TABLE

Item	Parameter	Conditions					Unit
			Min.	Typ.	Max.	Tolerance	
Substrate							
A1	Outline X			6.2		±0.1	mm
A2	Outline Y			5.2		±0.1	mm
A3	Substrate Thickness	bottom package to bottom die		0.87			mm
Chip Placement							
G3	Chip Thickness			0.40			mm
H1	Sensor Array Position vs. Bottom Metal X	center of array		1.905		±0.15	mm
H2	Sensor Array Position vs. Bottom Metal Y	center of outside track "RA"		1.99		±0.15	mm
H3 H4	Parallelism Sensor Array vs. Bottom Metal				0.1		mm
Bottom Metal Pattern							
J5	Lead Diameter			0.635		±0.03	mm
J6	Lead Pitch X (or Lead-Lead Distance X)			1.27			mm
J7	Lead Pitch Y (or Lead-Lead Distance Y)			1.27			mm
Glass/Reticle Cover							
L1	Glass / Reticle Size X			1.9			mm
L2	Glass / Reticle Size Y	glass reticle		3.24 3.30			mm mm
L3	Glass / Reticle Thickness	glass reticle		0.40 0.50			mm mm
M1	Glass / Reticle Position vs. Bottom Metal X			1.905			mm
M2	Glass / Reticle Position vs. Bottom Metal Y			2.285			mm
M3 M4	Parallelism Reticle Pattern vs. Bottom Metal				0.15		mm
Encapsulation							
E1	Coating Excess	surface glass to surface coating			0.05		mm
Thickness Specifications							
T1	Overall Thickness	bottom substrate to top of glass / reticle	1.50	1.70	1.95		mm
T2	Solder Ball Height	drawing not to scale	0.40		0.54		mm
T3	Solder Ball Coplanarity					±0.05	mm
T5	Solder Ball Diameter			0.635			mm

REVISION HISTORY

Rev	Notes	Pages affected
A1	Initial version	
B1	Dimension Table: items T1, T2 changed; Disclaimer update	3, 4

GENERAL HANDLING INSTRUCTIONS

After opening the dry pack, devices must be mounted within 8 hours (in factory conditions of maximum 30 °C / 60 % RH) or must be stored at < 10 % RH. Devices require baking before mounting if the Humidity Indicator Card shows > 10 % when read at 23 °C ± 5 °C or if the conditions mentioned above are not met. Devices may be baked for 72 hours at 100 °C using high-temperature device containers (trays).

Samples

Samples may not be subject for dry pack delivery, and, in that case, are not intended for reflow soldering.

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