iC-LSHC optoBGA LSH2C
PHOTOSENSOR PACKAGE SPECIFICATION

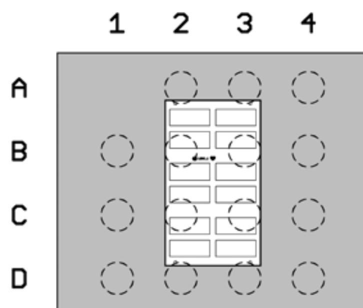
ORDERING INFORMATION

Type	Package	Options	Order Designation
iC-LSHC	oBGA LSH2C	reticle	iC-LSHC oBGA LSH2C -xxR

6.2 mm x 5.2 mm
RoHS compliant

PIN CONFIGURATION

(top view)



PIN FUNCTIONS

No.	Name	Function
		For pinout information please refer to the relevant IC data sheets.
A2		
A3		
A4		
B1		
B2		
B3		
B4		
C1		
C2		
C3		
C4		
D1		
D2		
D3		
D4		

ABSOLUTE MAXIMUM RATINGS

Item	Symbol	Parameter	Conditions	Fig.	Min.	Typ.	Max.	Unit
TG1	Ta	Operating Ambient Temperature Range (extended temperature range on request)			-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

TOP

SIDE

BOTTOM

DRB_LSH2C_PACK_1

DIMENSION TABLE

Item	Parameter	Conditions	Min.	Typ.	Max.	Tolerance	Unit
	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			0.30			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 outermost photodiodes		1.94		±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			3.3			mm
L3	Glass/Reticle Thickness	glass reticle		0.4 0.5			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 (nominal glass cover thickness of 0.5 mm)	1.5		1.85		mm
T2	Solder Ball Height	drawing not to scale	0.36		0.5		mm
T3	Solder Ball Coplanarity					±0.05	mm
T5	Solder Ball Diameter			0.635			mm

REVISION HISTORY

Rev	Notes	Pages affected
A1	Initial version	
A2	Ordering Information and Pin Funktions revised	1
B1	Ordering Information changed; Absolute Maximum Ratings: Operating Ambient Temperature Range Min. extended, Storage Temperature Range adapted; TG3: Conditions: convection reflow changed from 260°C to 245°C; Disclaimer updated	1, 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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