

iC-LFM oBGA LFM1C

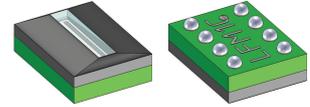
PACKAGE SPECIFICATION



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ORDERING INFORMATION

Type	Package	Options	Order Designation
iC-LFM	oBGA LFM1C	---	iC-LFM oBGA LFM1C

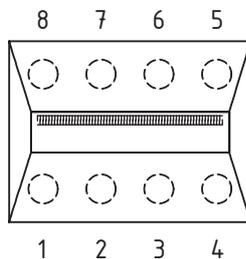


5.3 mm x 4.0 mm
RoHS compliant

PIN CONFIGURATION

PIN FUNCTIONS

(top view)



No.	Name	Function
1	SI	Start Integration Input
2	CLK	Clock Input
3	AO	Analog Output
4	VDD_VCC	+ 5 V Supply Voltage
5	RSET	Bias Current Adjust
6	AGND	Analog Ground
7	GND	Digital Ground
8	DIS	Disable Integration Input

ABSOLUTE MAXIMUM RATINGS

Item	Symbol	Parameter	Conditions	Fig.				Unit
					Min.	Typ.	Max.	
TG1	Ta	Operating Ambient Temperature Range			-25		85	°C
TG2	Ts	Storage Temperature Range			-25		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

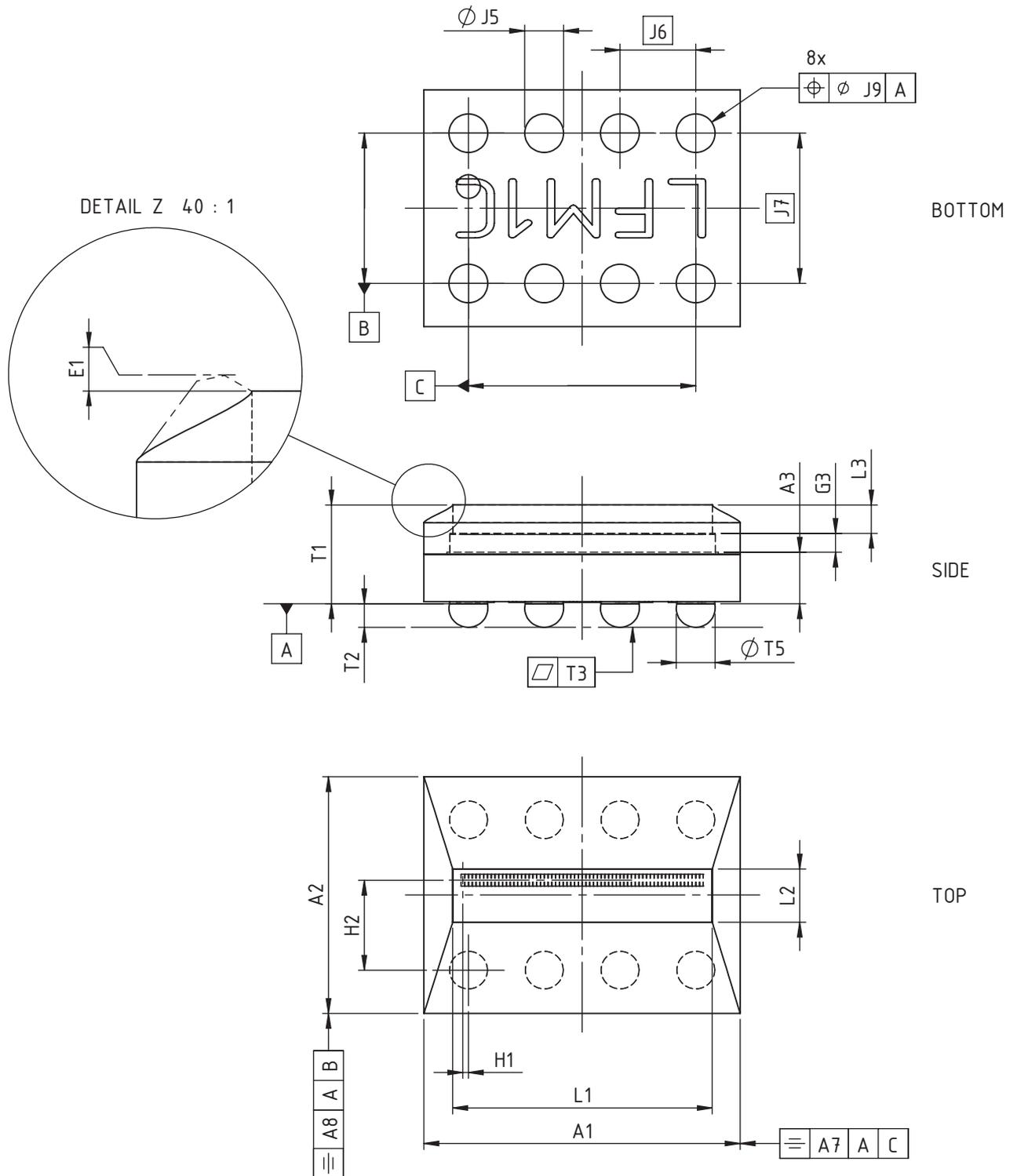
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PHYSICAL DIMENSIONS



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DIMENSION TABLE

Item	Parameter	Conditions					Unit
			Min.	Typ.	Max.	Tolerance	
	Substrate						
A1	Outline X			5.30		±0.10	mm
A2	Outline Y			4.00		±0.10	mm
A3	Substrate Thickness	bottom substrate to bottom die typical value		0.90			mm
A7	Outline Symmetry X	vs. bottom metal pattern			0.20		mm
A8	Outline Symmetry Y	vs. bottom metal pattern			0.20		mm
	Chip						
G3	Chip Thickness			0.30			mm
	Chip Placement						
H1	Chip Position vs. Bottom Metal Pattern X	bottom metal pattern vs. center of 1st sensor		0.095		±0.175	mm
H2	Chip Position vs. Bottom Metal Pattern Y	bottom metal pattern vs. center of 1st sensor		1.520		±0.175	mm
	Bottom Metal Pattern						
J5	Lead Diameter			0.635		±0.03	mm
J6	Lead Pitch X (or Lead to Lead Distance X)			1.27			mm
J7	Lead Pitch Y (or Lead to Lead Distance Y)			2.54			mm
J9	Lead to Lead Position Tolerance				0.10		mm
	Glass Cover						
L1	Glass Size X			4.35			mm
L2	Glass Size Y			0.90			mm
L3	Glass Thickness			0.40			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 thickness of 0.4 mm) ¹⁾	1.40	1.60	1.80		mm
T2	Solder Ball Height	drawing not to scale	0.40		0.54		mm
T3	Solder Ball Planarity				0.10		mm
T5	Solder Ball Diameter			0.635			mm

Notes:

1) Coating normally adjusted to top surface of glass

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REVISION HISTORY

Rev	Notes	Pages affected
A1	Initial version	
B1	Glass dimensions update (glass cover L1); Operating Ambient Temperature Range corrected (Absolute Maximum Ratings TG1); disclaimer update	all

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 are not subject to dry pack delivery and are not intended for reflow soldering.

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