

iC-OW OBGA OW1C

PACKAGE SPECIFICATION

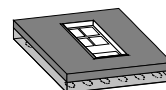
target specification



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ORDERING INFORMATION

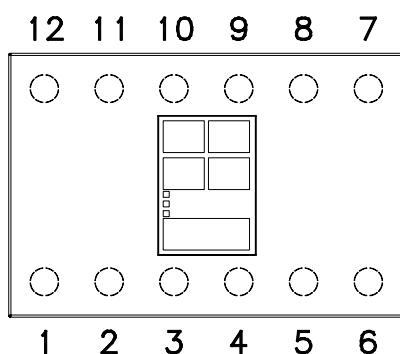
Type	Package	Options	Order Designation
iC-OW	optoBGA OW1C	none	iC-OW OBGA OW1C



9.1mm x 6.1mm

PIN CONFIGURATION

(top view)



PIN FUNCTIONS

No.	Name	Function
1	AGND	Reference Ground for ILR, IZ, CLR circuitry
2	GND	Ground
3	VCC	+5V Supply Voltage
4	A	Track A Output
5	B	Track B Output
6	Z	Track Z Output
7	NERR	Error Output (low active) / AND Gate Disable Input
8	LED	LED Current Control Output
9	CLR	Capacitor for LED Current Control
10	IZ	Index Track Threshold Adjust
11	ILR	LED Current Control Setup
12	AGND	Reference Ground for ILR, IZ, CLR circuitry

ABSOLUTE MAXIMUM RATINGS

Item	Symbol	Parameter	Conditions	Fig.				Unit
					Min.	Typ.	Max.	
TG1	Ta	Operating Ambient Temperature Range (extended temperature range on request)			-20		90	°C
TG2	Ts	Storage Temperature Range			-30		110	°C
TG3	Tl	Lead Temperature	soldering, 10 sec				235	°C

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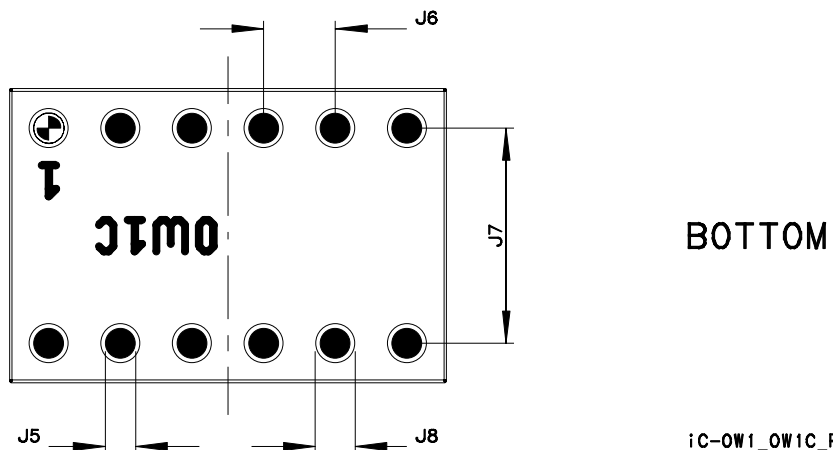
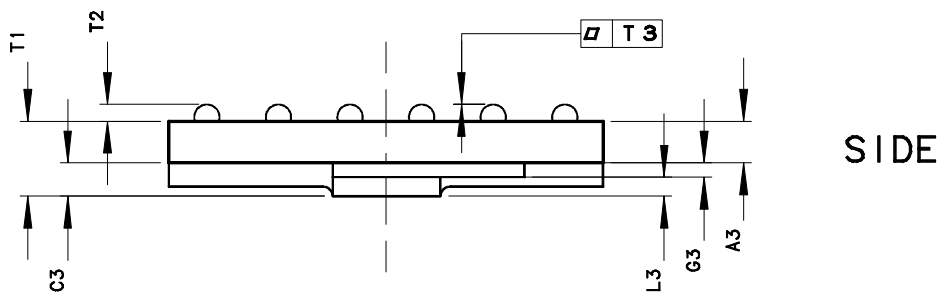
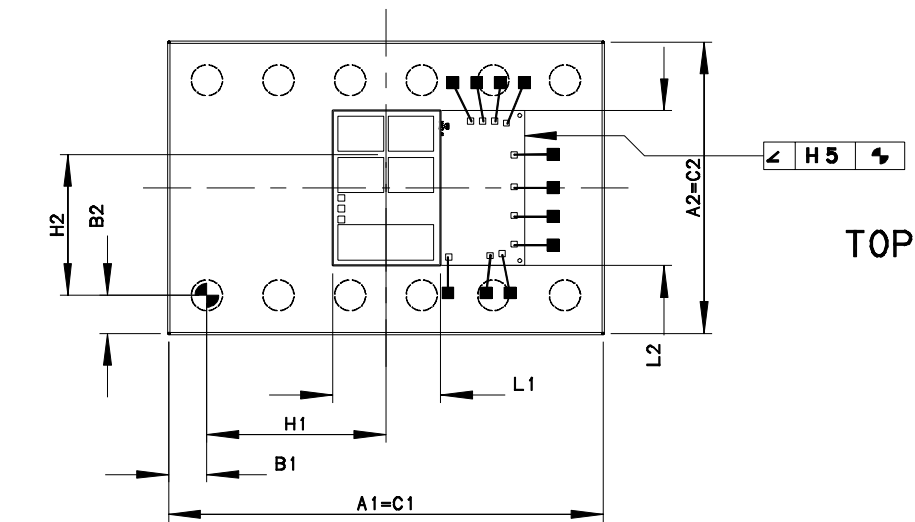
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PHYSICAL DIMENSIONS (given in mm)



iC-OW1_OW1C_PACK_1

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DIMENSION TABLE

Item	Parameter	Comments					Unit
			Min.	Typ.	Max.	Tolerance	
Substrate							
A1	Outline X			9.1		±0.1	mm
A2	Outline Y			6.1		±0.1	mm
A3	Substrate Thickness	bottom package to bottom die	0.783	0.87	0.957		mm
Reference							
B1	Outline vs. Reference X	lead center bottom left is reference		0.8		±0.1	mm
B2	Outline vs. Reference Y			0.8		±0.1	mm
Encapsulation							
C3	Mold Thickness	note ¹⁾	0.445		0.755		mm
Chip Placement							
G3	Chip Thickness			0.3		±0.025	mm
H1	Chip Position vs. Reference X	halfway between sensors		3.75		±0.195	mm
H2	Chip Position vs. Reference Y	halfway between sensors		2.95		±0.195	mm
H5	Chip Tilt Angle vs. Paddle					±1.6	DEG
Bottom Metal Pattern							
J5	Lead Size			0.635		±0.03	mm
J6	Lead Pitch X (or Lead-Lead Distance X)			1.5			mm
J7	Lead Pitch Y (or Lead-Lead Distance Y)			4.5			mm
J8	Solder Stop Off			0.835		±0.1	mm
Glass Cover							
L1	Glass Size X			2.26		±0.05	mm
L2	Glass Size Y			3.24		±0.05	mm
L3	Glass Thickness	note ¹⁾		0.4		±0.03	mm
Thickness Specifications							
T1	Overall Thickness	note ¹⁾ , bottom substrate to top glass	1.428		1.712		mm
T2	Solder Ball Height		0.36		0.5		mm
T3	Solder Ball Coplanarity					±0.05	mm

Notes: ¹⁾ nominal glass cover thickness of 0.4mm

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REVISION HISTORY

Rev	Notes	Pages affected
A1	Initial version	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 <20% RH. Devices require baking before mounting if the Humidity Indicator Card shows >20% 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 substitute for dry pack delivery and are not intended for reflow soldering. Remove any protective film if present before tempering or soldering. Use tweezers, pull upwards slowly, any horizontal pulling must be avoided. Do not touch the iC surface after removing the film. Never press on the iC coating.

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