

Customer's name :

Specification No. : Ref.CE-P676 03/10

Specifications sheet for approval

Product name : L250-LENS30

Parts No. : 516-A00060

Page No.

page	item	drawing No.
1	Drawing	AL2-032-03
2	Packing specification	
3	Physical properties	

Approval Signature

CITIZEN ELECTRONICS CO.,LTD

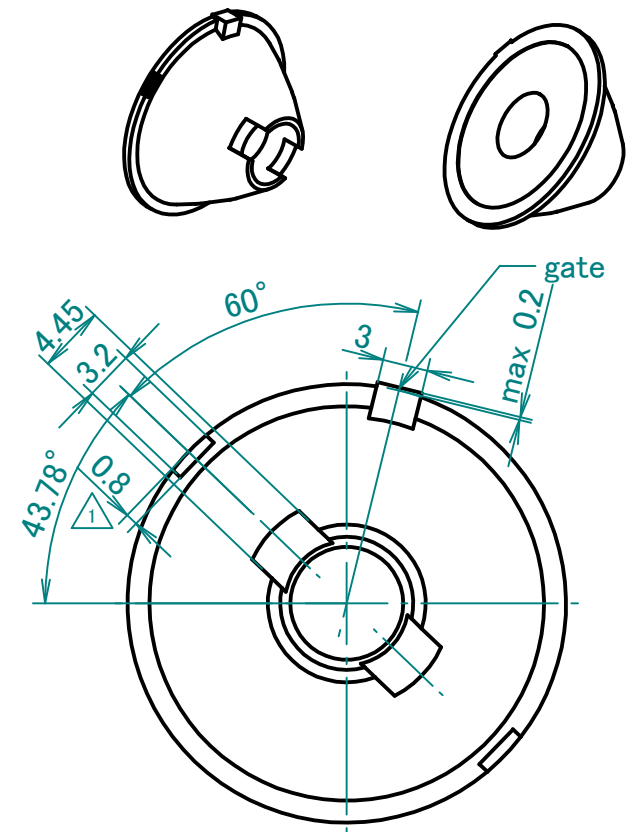
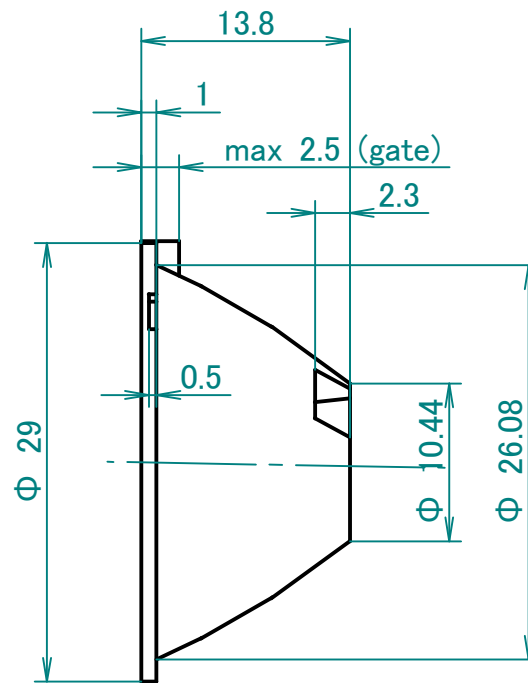
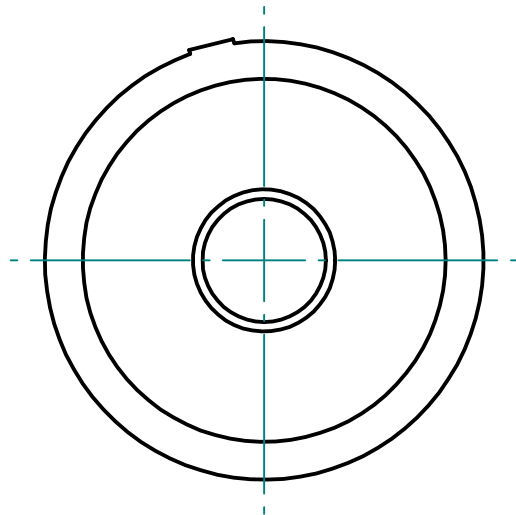
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Sales department				
Approved	Checked		Drawn	

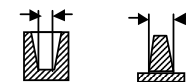
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(SGP-0013-F05-0)

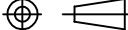


LIMITS UNLESS OTHERWISE NOTE				
		★		
$L \leq 6$	± 0.05	± 0.1	± 0.2	± 0.3
$6 < L \leq 18$	± 0.08	± 0.2	± 0.3	± 0.5
$18 < L \leq 50$	± 0.1	± 0.3	± 0.5	± 1.0
$50 < L \leq 120$	± 0.18	± 0.45	± 0.8	± 1.5
$120 < L \leq 400$	± 0.28	± 0.7	± 1.2	± 2.0
Angle	$\pm 1^\circ$			

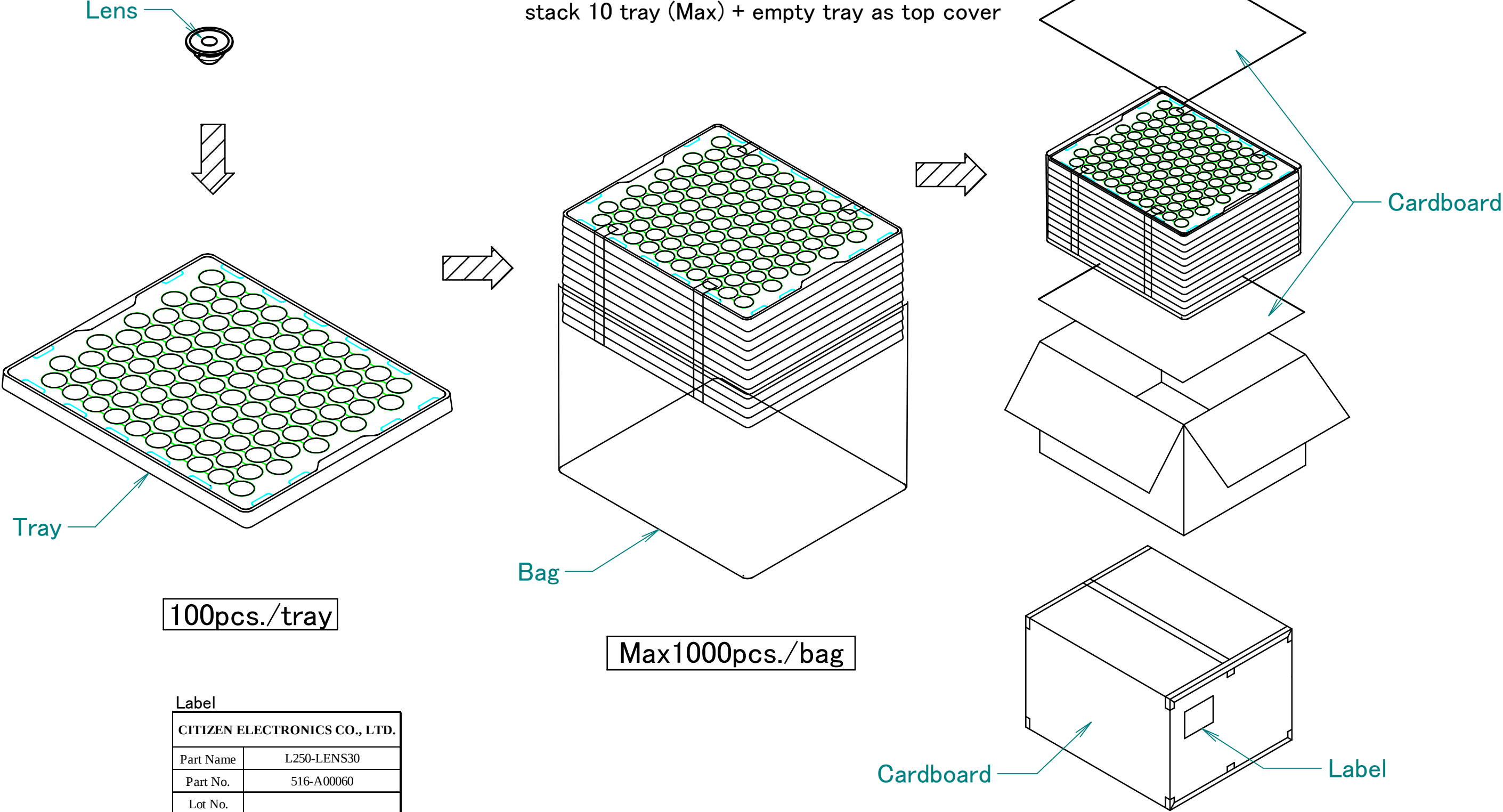
Remarks

- 1 This drawing for Citizen Electronics Co., LTD. : CL-L250 series only
- 2 Material: PC
- 3 The angle R without directions is set to 0.2.
- 4 No scratches, stain, etc allows.
- 6 Dimension is based on as follows.



6			General tolerances				Symbol	L250-LENS30		
5			Dimensions					Name	Lens	
4			Angles		refer leftward table			Part No.	516-A00060	
3			Alternation				Drawin No.	AL2-032-03		
2			Drawn		K.Matsuyama			Date	2009.07.14	
1 ¹	10.01.13	Adjustment of fit	Checked		K.Sasuga			CITIZEN ELECTRONICS Co.,ltd		
	09.12.03	full-fledged revision	Approved		K.Funakubo					
Mark	Date	Description Appro.	Scale	2 / 1		Unit	mm			

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7			General tolerances		Symbol	L250-LENS30	
6			Dimensions		Name	packing specification	
5			Angles		Part No.		
4			Alternation		Drawn No.		
3			Drawn	K.Matsuyama	Date	2010/01/13	
2			Checked	K.Sasuga	CITIZEN ELECTRONICS Co.,ltd		
1			Approved	K.Funakubo			
Mark	Date	Description	Appr.	Scale	free /	Unit	mm

PHYSICAL PROPERTIES

Property	Test Method	Condition	Unit	
Optical				
Light transmission	ASTM D 1003	3mm	%	88
Reflective Index	ASTM D 542	–	–	1.585
Mechanical				
Tensile modulus	ISO 527-1 and ISO 527-2	1mm/min	MPa	2400
Tensile strength at yield		50mm/min	MPa	62
Tensile strain at yield		50mm/min	%	6
Nominal tensile strain at break		50mm/min	%	>50
Flexural modulus	ISO 178	2mm/min	MPa	2400
Flexural strength	ISO 178	2mm/min	MPa	94
Charpy impact strength	ISO 179	unnotched	kJ/m ²	NB
	ISO 179	notched	kJ/m ²	58
Rockwell hardness	ISO 2039-2	M scale	–	77
Thermal				
Heat deflection temperature	ISO 75-1 and ISO 75-2	1.8MPa	°C	125
		0.45MPa	°C	138
Vicat softening point	ISO 306	50°C/h 50N	°C	142
Melt volume flow rate	ISO 1133	300°C load 1.2kg	cm ³ /10min	24
Coefficient of linear expansion	ISO 11359-2	parallel	x10 ⁻⁴ /k	0.7
		vertical	x10 ⁻⁴ /k	0.7
Electrical				
Surface resistivity	IEC 60093	–	Ω	>10 ¹⁵
Volume resistivity	IEC 60093	–	Ω m	>10 ¹³
Withstand voltage	IEC 60243-1	short time test	MV/m	30
Specific Inductive capacity	IEC 60250	100Hz	–	3.1
		1MHz	–	3
Dielectric loss tangent	IEC 60250	100Hz	x10 ⁻⁴	10
		1MHz	x10 ⁻⁴	90
Tracking resistance	IEC 60112	–	–	225
Other				
Density	ISO 1183	–	kg/m ³	1200
Water absorption at 23°C	ISO 62	In water 24h	%	0.2
Flammability	UL94	–	class	HB

*Values reported are typical and should not be used for specification purpose.