

Customer's name :

Specification No. : Ref.CE-P678 03/10

Specifications sheet for approval

Product name : L250-LENS15

Parts No. : 516-A00070

Page No.

page	item	drawing No.
1	Drawing	AL2-033-03
2	Packing specification	
3	Physical properties	

Approval Signature

CITIZEN ELECTRONICS CO.,LTD

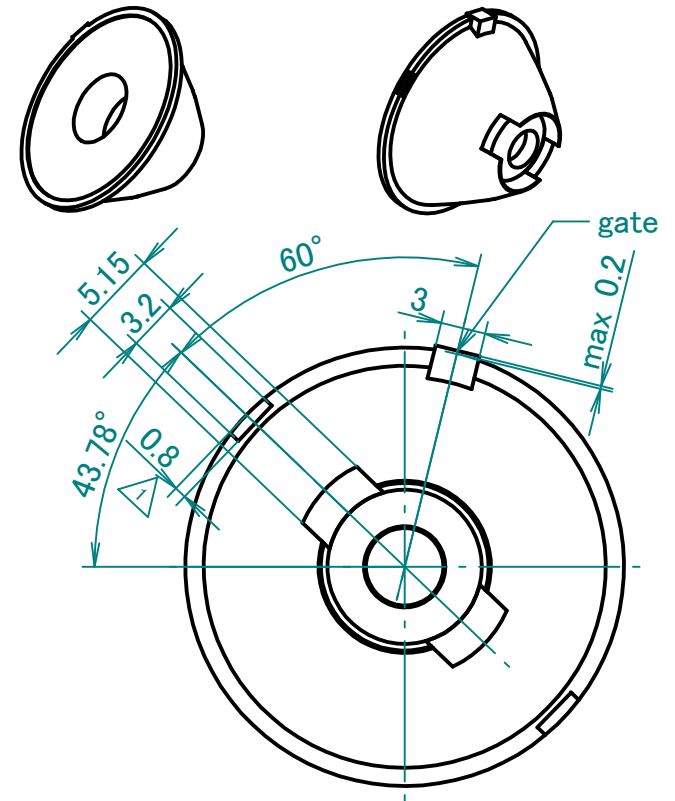
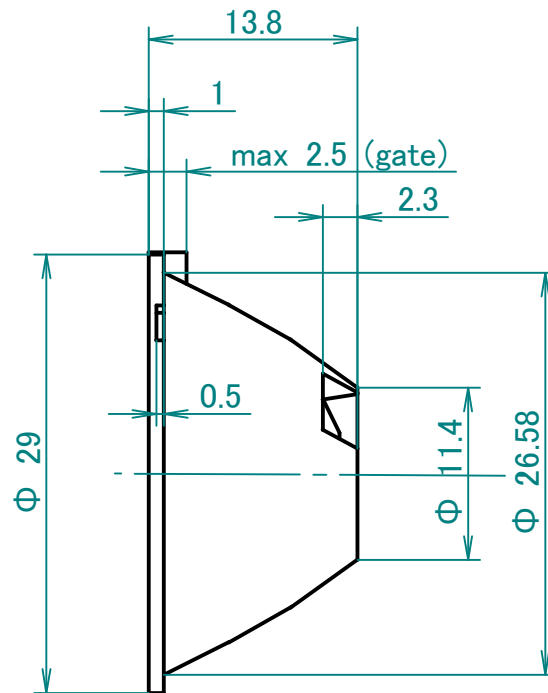
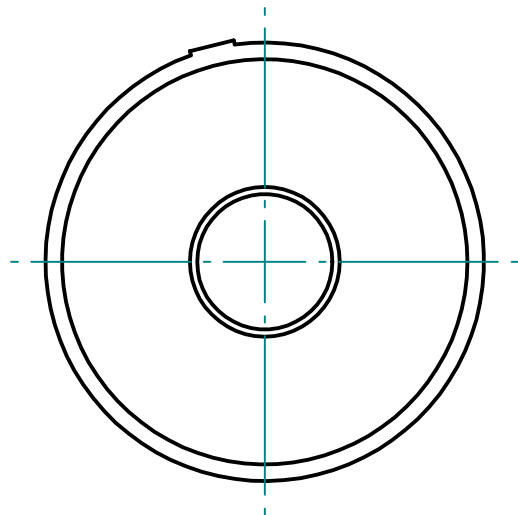
1-23-1,Kami-Kurechi,Fujiyoshida-shi,
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Tel : (0555)23-4121

Fax : (0555)24-2426

Sales department				
Approved	Checked		Drawn	

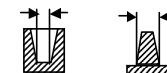
GQP-0013-F03-3
(SGP-0013-F05-0)



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	$\pm 1^\circ$			

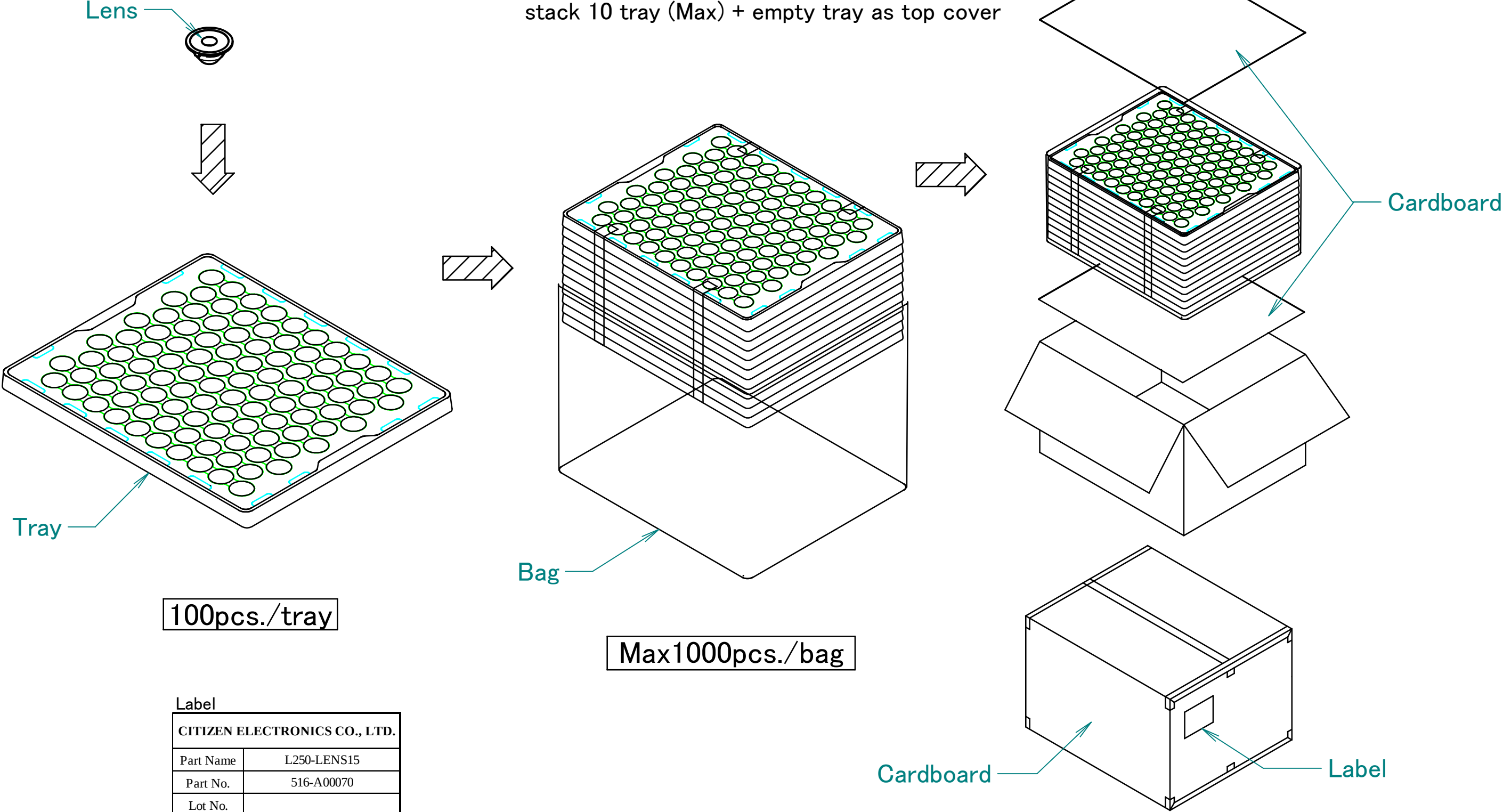
Remarks

- 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.



			General tolerances		Symbol	L250-LENS15	
△6			Dimensions	refer leftward table	Name	Lens	
△5			Angles	refer leftward table	Part No.	516-A00070	
△4			Alternation		Drawn No.	AL2-033-03	
△3			Drawn	K.Matsuyama	Date	2009.07.14	⊕
△2			Checked	K.Sasuga	CITIZEN ELECTRONICS Co.,ltd		
△1	10.01.13	Adjustment of fit	Approved	K.Funakubo			
	09.12.03	full-fledged revision	Scale 2 / 1				
Mark	Date	Description Appro.	Unit	mm			

This drawing is the property of Citizen Electronics Co.,LTD. and should not be disclosed to any third party without prior permission of Citizen Electronics Co.,LTD.



Label			
CITIZEN ELECTRONICS CO., LTD.			
Part Name	L250-LENS15		
Part No.	516-A00070		
Lot No.			
Quantity			
Date		QC	

arbitrary size

7			General tolerances		Symbol	L250-LENS15	
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
Flexual modulus	ISO 178	2mm/min	MPa	2400
Flexual 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.