

# Create 3D Models from Technical Drawings

I have a collection of technical drawings for photographic lenses and lens holders.

From that you must create 3D Models for me to use as components in 3D designs. Please deliver STEP, OBJ and X\_T(Parasolid) versions.

- Focusafe FS2328B13M8
- FS-BLH13072
- FS15218FEBMP
- JSD JSD2157
- JSD HA1313\_A115P18-052
- CW-BL15620-5MP
- TOWIN CCL127028PMP
- HK-8244-1042-1
- TY-6046-D1-MM
- TY-6046-C1-MM
- 50307A
- 50307C
- 135-4B-WZ-LCP
- BLH13072
- CA5301A

The created models must

- Have mounting holes in the correct place
- Have correct sizes
- Must have the shape and size of the glass
- Each model in a separate set of files named after the model number
- Coloring of black parts should be black, glass transparent

CW-BL15620-5MP

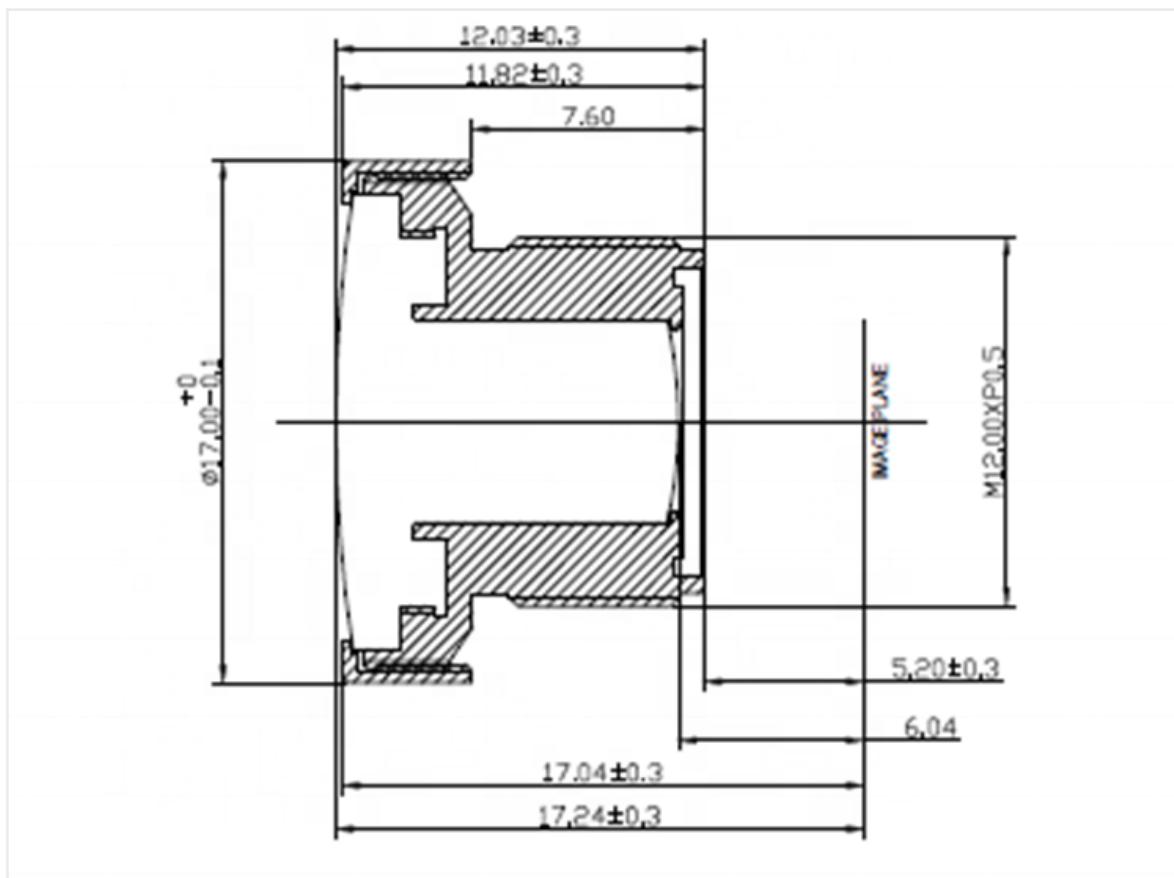
[http://www.cwlens.com/en/pd.jsp?id=13#keyword=CW-BL15620-5MP&\\_pp=0\\_378](http://www.cwlens.com/en/pd.jsp?id=13#keyword=CW-BL15620-5MP&_pp=0_378)



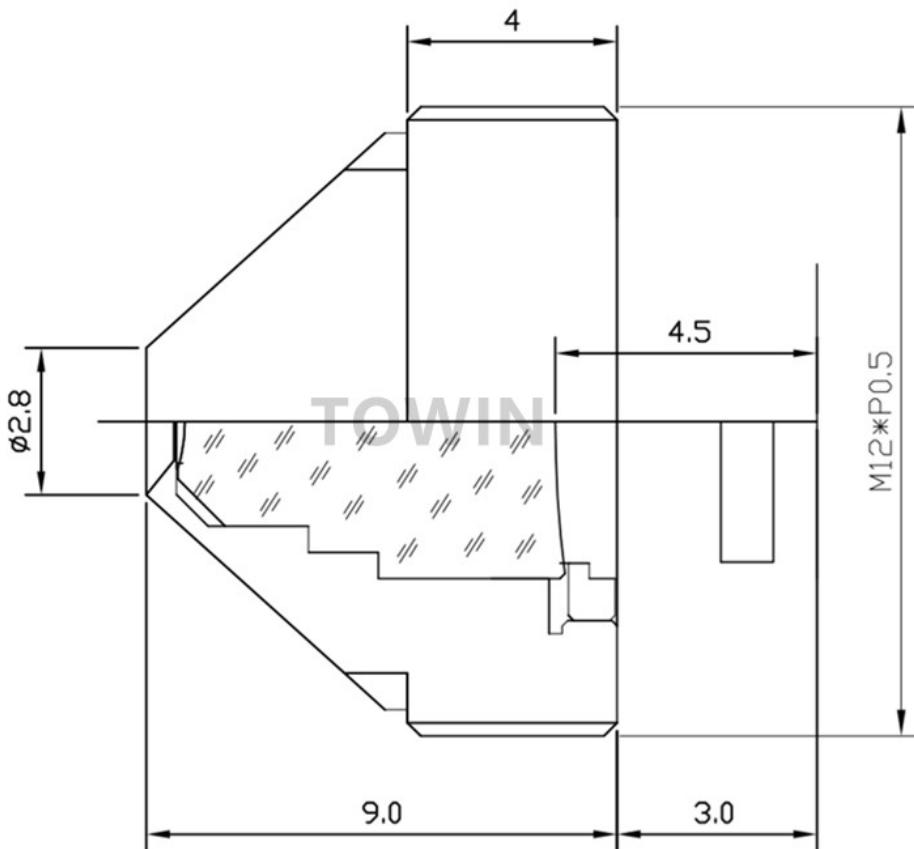
Diameter 20  
Length 16.4

**HK-8244-1042-1**





**TOWIN CCL127028PMP**

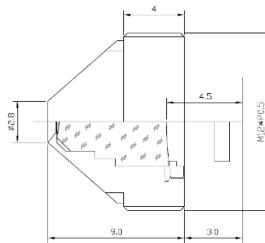


CCL127028PMP Pinhole lens 2.8mm 12.7 IR 3MP HD CCTV M12 mount  
lens for Covert hidden Surveillance



## SPECIFICATION

IMAGE FORMAT	1/2.7"
FOCAL LENGTH	2.8mm
F.O.V.	140°(D)
RESOLUTION	3 Megapixel
APERTURE	F2.4
MOUNT	M12X0.5
IRIS	Fixed
FOCUS	Manual
ZOOM	Fixed
M.O.D.	0.2m



SCALE		DRAWN		MODEL	CCL127028PMP	REV	DESCRIPTION	DATE	NAME
DATE		CHECK				①			
UNIT	mm	APPROVE				②			
						③			

TS-2314T-A10

JSD2157

**Waterproof IP68 FOV 168 degree F2.0 m12  
megapixel cctv lens for car DVR**

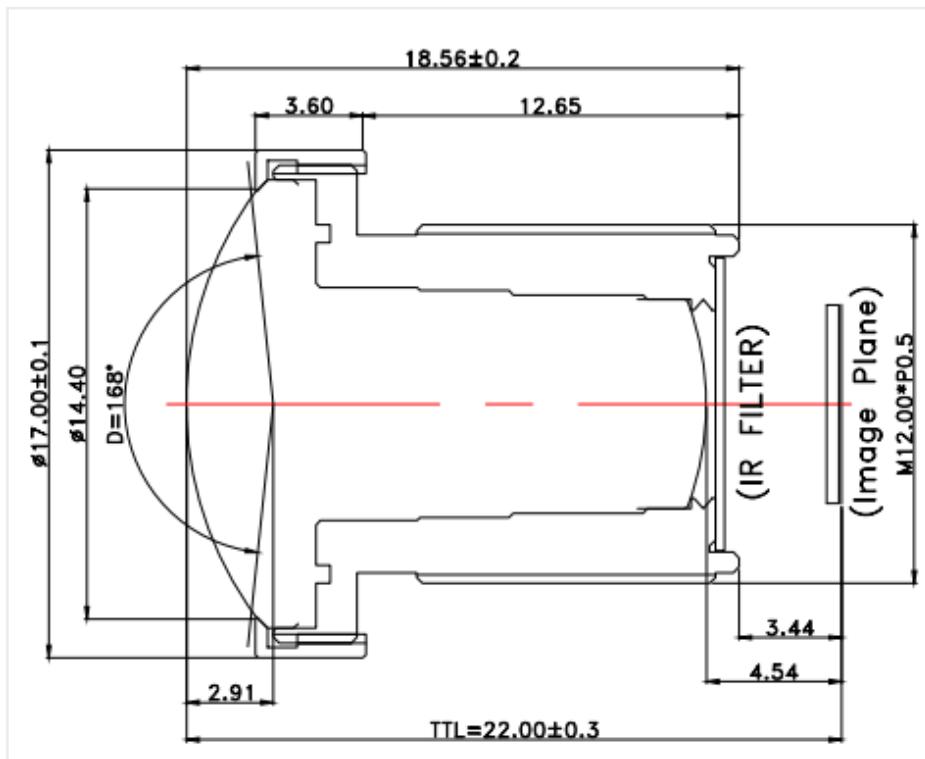
**Free samples for testing  
Aperture F2.0  
HFOV up to 148 degree  
Operation temp from -40°C to 80°C  
All glasses + metal structure**

# IP waterproof IP68

## Product Description

<b>Model</b>	JSD2157-A1
<b>EFL</b>	2.35mm
<b>Aperture</b>	F2.0
<b>FOV</b>	DFOV=168 HFOV=148 VFOV=84
<b>Diameter</b>	17.mm
<b>Structure</b>	6G
<b>TTL</b>	22mm
<b>Mount</b>	M12x0.5

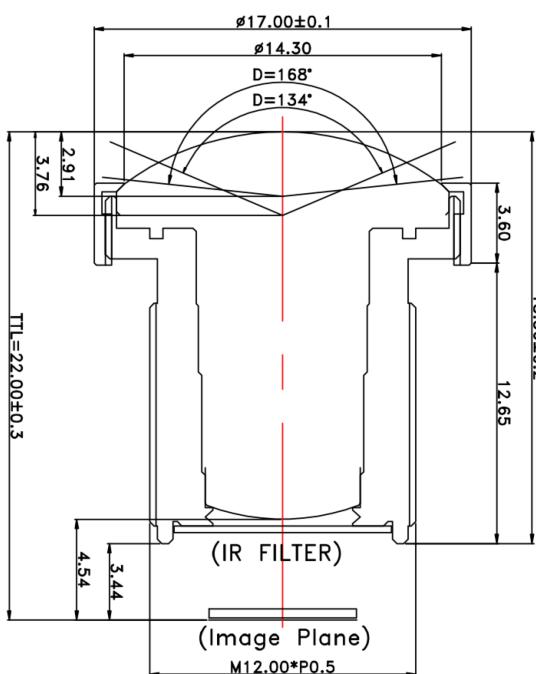
## Product Pictures



PRODUCT NAME : JSD2157-A1

## 1. SPECIFICATION:

1.RESOLUTION	2.MAX IMAGE CIRCLE	3.FOCAL LENGTH (EFL)
	$\varnothing 6.70\text{ mm}$	$f=2.35\pm 5\%\text{ mm}$
4.F/NO (INFINITE)	$f/NO=2.0\pm 5\%$	$BFL=4.54\pm 0.2\text{ mm}$
5.BIG FOCAL LENGTH		$FB=3.44\pm 0.2\text{ mm}$
6.FLANGE BACK LENGTH		
7.Thread Size		
8.Element	$M12\ast 0.5$	
	$6G+IR650$	
9.IR FILTER SPEC.(Built-in,Others available)		
$Tog >= 90\%$	$\text{@ } 440\text{--}620\text{ nm}$	
$T=50\%$	$\text{@ } 650\pm 10\text{ nm}$	
$Tog <= 3\%$	$\text{@ } 700\text{--}1000\text{ nm}$	
$T < 5\%$	$\text{@ } 1050\text{ nm}$	



## 2. OPTICAL LAYOUT:

REV	DESCRIPTION	DATE	NAME	JSD2157-A1				SCALE	DRAWN
				NAME	VIEW	REV	00		
①	新规作成	2019.10.10							
②									
③									
④									
				 金视达光电有限公司		DATE		CHECKED	
				SHENZHEN JINSHIDA OPTICALCO., LTD	BORDER		APPROVED		



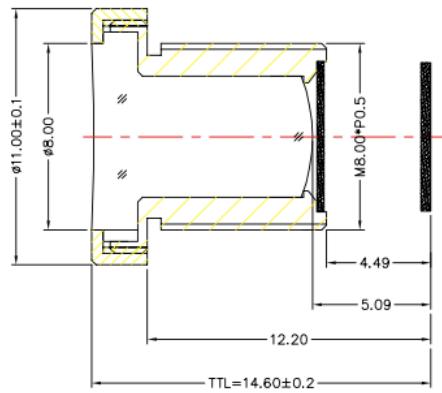


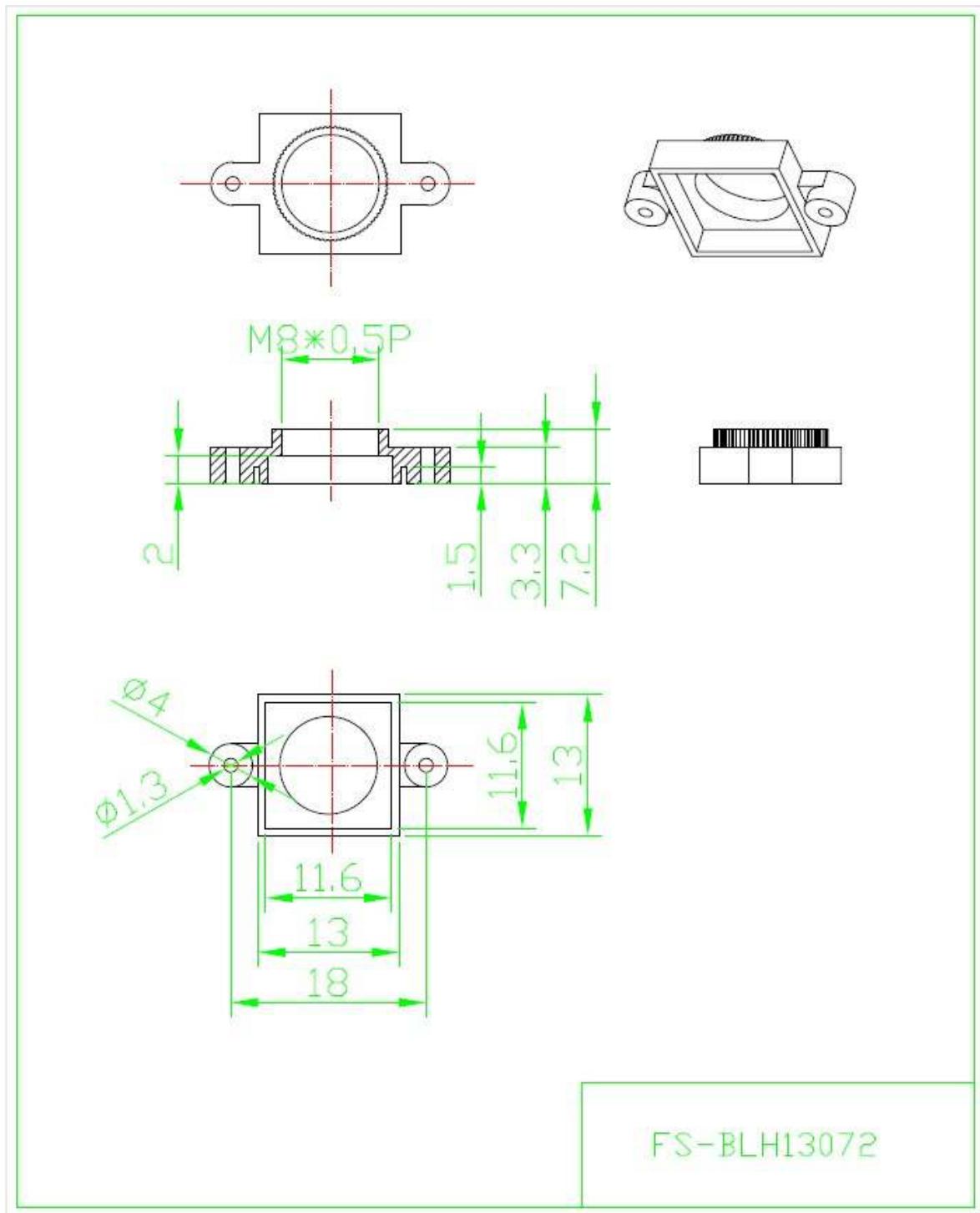
**FS2328B13M8 & FS-BLH13072**

## 1. SPECIFICATION:

1. Max Image Circle	<u>Ø 6.4mm</u>
2. FOCAL LENGTH (EFL)	<u>f=2.3mm</u>
3. F/NO (INFINITE)	<u>F/NO=2.8</u>
4. BACK FOCAL LENGTH	<u>BFL=5.09mm</u>
5. FLANGE BACK LENGTH	<u>FB=4.49mm</u>
6. Thread Size	<u>M8*P0.5</u>
7. Element	<u>5G+IR</u>
8. CUT FREQUENCY AT 50%	
	Tavg>=88% @440-620nm
	T=50% @648±10nm
	T<5% @>720nm

NOTE	SPECIFICATION		
Sensor 型号	1/3" AR0330	1/3" OV5653	1/4" OV5640
视场角 FOV	Horizontal	105°	91°
	Vertical	55°	66°
	Diagonal	129°	125°
TV DISTORTION	<-37%	<-28%	<-17.5%
Relative Ill.	>95%	>95%	>96%
主光线角度 (CRA)	<15.6°	<15.4°	<12.4°





## Focusafe FS15218FEBMP



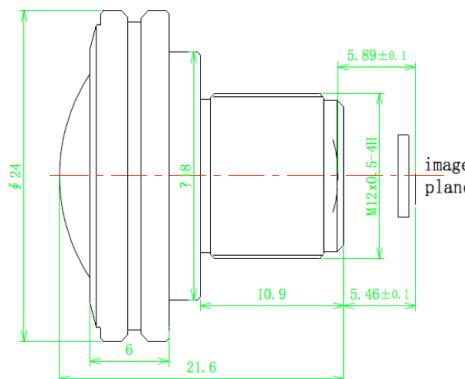
Fuzhou Focusafe Optoelectronic Technology Co.,Ltd.



Model No.		FS15218FEBMP	Product Photo (Just for Reference)
Description		8 Megapixel Fisheye Board IR CCTV Lens	
Focal Length		1.52mm	
Image Circle		4.2mm	
Aperture		F1.8	
Image Size		1/2.3"	
Angle of View(D/H/V)		D190°*H190°*V190°	
Mount Type		M12*0.5	
Minimum Object Distance		≥0.3m	
Opticsl Back Focal Length		5.89mm	
Flange Back Focal Length		5.46mm	
Lens Structure		9G	
Operation Mode	Iris	Fixed	
	Focus	Fixed	
	Zoom	Fixed	
External Dimensions(mm)		Φ24(D)*21.6(L)	
Net Weight		18g	



**Model No.: FS15218FEBMP**

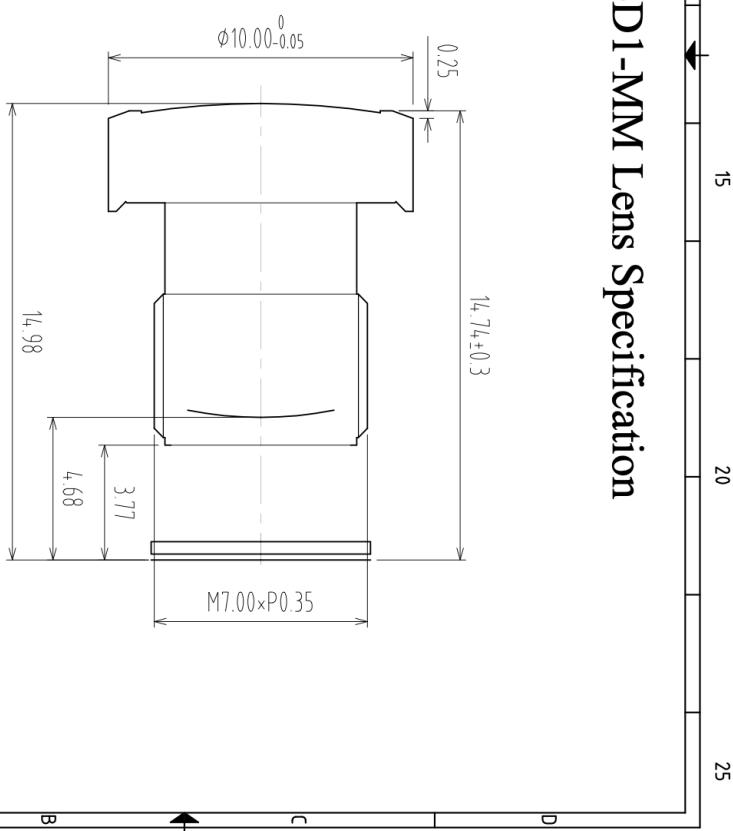


Address:Building 10,Jinshan SCI-TEC Park,No.7,Jinzhou North Road,Jinshan Industrial District,Fuzhou,China Zip Code: 350002  
<http://www.focusafe.com> E-mail:sales@focusafe.com Tel:+86-591-83337825 83337525 Fax:+86-591-88263182

**TY-6046-D1-MM**

## TY-6046-D1-MM Lens Specification

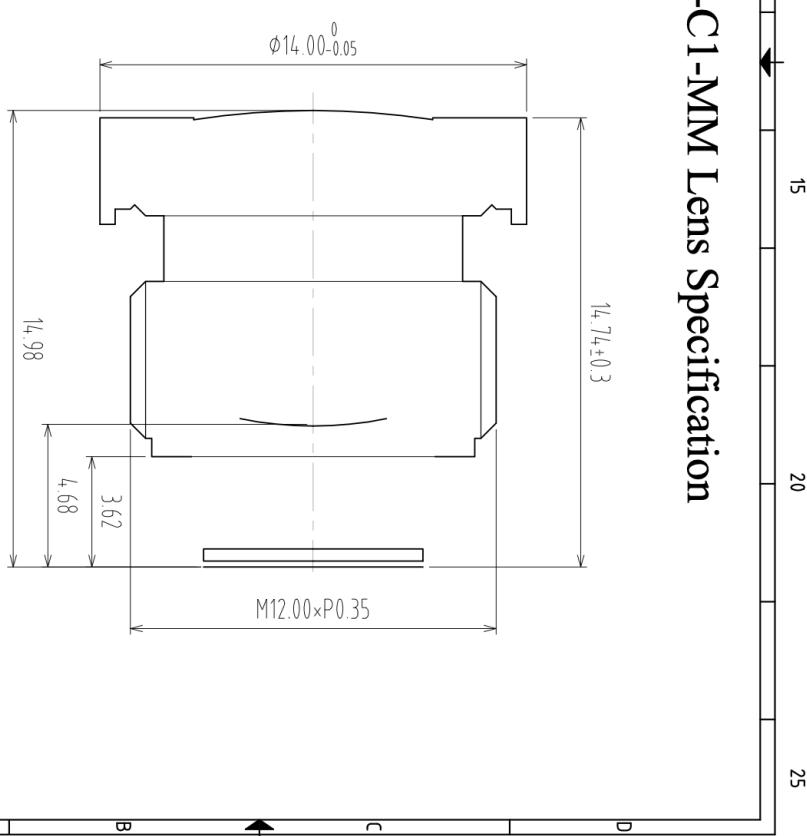
	D		
1	EFL	2.9	
2	B.F.L	4.68	
3	F.B.L	3.77	
4	F.NO	2.4	
5	Sensor	1/3"	1/2.8"
		ARR330	0V4689
6	FOV	HFOV 56°	VFOV 104°
		DFOV 124°	113°
7	TV distortion	17%	20%
8	Thread size	M12xP0.5	4G
9	Structure	650 IR	
10	IR filter		
		Targ=>88% T=50% Targ=<5% @ 420-600 nm @ 650±10nm @ 700-1050 nm	



TY-6046-C1-MM

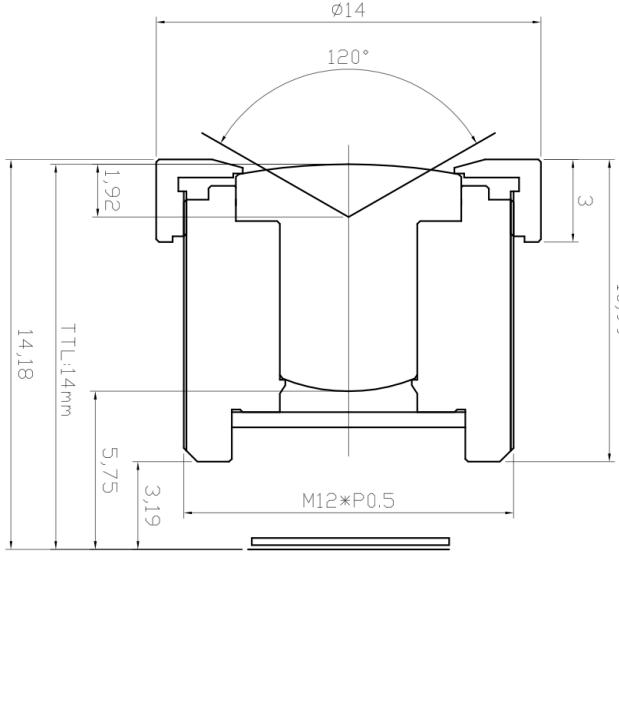
TY-6046-C1-MM Lens Specification

1	Eff.	2.9
2	B.F.L	4.68
3	FBL	3.62
4	F.NO	2.4
5	Sensor	
	HFOV	1/3"
6	F0V	AR0330
	VFOV	0.04689
	DFOV	0.02710
7	TV distortion	1/2.8"
8	Thread size	1/2.7"
9	Structure	1/2.7"
10	IR filter	1/2.7"
		650 IR
	Tavg>-88%	@ 420-600 nm
	T=50%	@ 650±10nm
	Tavg<-5%	@ 700-1050 nm



标记	变更事项			时间	姓名	<input checked="" type="checkbox"/> <input type="radio"/>	材料
①							
②							
③							
④							
版本	核准	审核	制图	单位	mm	比例	1/1
				页码	1/1	数量	1
名称: TY-6046-C1-MM							

50307A

产品编码： 50307A																																																																											
1、镜头参数																																																																											
1、芯片规格																																																																											
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= 1/2.7"(0V2710&0V2715)																																																																											
2、焦距f																																																																											
= 3.64 mm																																																																											
3、F/N0																																																																											
= 2.4																																																																											
4、相机后焦																																																																											
= 3.19 mm																																																																											
5、光学后焦																																																																											
= 5.75 mm																																																																											
6、视场角(D)																																																																											
= 120°(H=100°V=53°)																																																																											
7、T\畸变																																																																											
< -17%																																																																											
8、光学畸变																																																																											
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9、螺纹																																																																											
= M12*P0.5																																																																											
10、结构																																																																											
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13、CRA																																																																											
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2、结构示意图:																																																																											
																																																																											
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="2" style="text-align: left;">Common Tolerance</th> <th colspan="2" style="text-align: left;">材料(环保):</th> <th colspan="2" style="text-align: left;">名称</th> <th colspan="2" style="text-align: left;">设计</th> <th colspan="2" style="text-align: left;">日期</th> </tr> <tr> <th>Model</th> <th>Value</th> <th>Angle</th> <th>图号</th> <th>50307A</th> <th>校对</th> <th>审核</th> <th>校对</th> <th>审核</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>0.00</td> <td>±0.03</td> <td>2</td> <td>0.03</td> <td>0.05</td> <td>3</td> <td>0.1</td> <td>0.05</td> <td>4</td> <td>0.05</td> <td>0.05</td> <td>5</td> <td>1</td> <td>5.1</td> <td>数量</td> <td>6</td> <td>版本</td> <td>7</td> <td>页码</td> <td>8</td> <td>8</td> <td>9</td> <td>9</td> </tr> <tr> <td>No.</td> <td>修订内容</td> <td>修订者</td> <td>日期</td> <td>1</td> <td>2</td> <td>3</td> <td>4</td> <td>5</td> <td>6</td> <td>7</td> <td>8</td> <td>9</td> <td>10</td> <td>11</td> <td>12</td> <td>13</td> <td>14</td> <td>15</td> <td>16</td> <td>17</td> <td>18</td> <td>19</td> <td>20</td> </tr> </tbody> </table>									Common Tolerance		材料(环保):		名称		设计		日期		Model	Value	Angle	图号	50307A	校对	审核	校对	审核	1	0.00	±0.03	2	0.03	0.05	3	0.1	0.05	4	0.05	0.05	5	1	5.1	数量	6	版本	7	页码	8	8	9	9	No.	修订内容	修订者	日期	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Common Tolerance		材料(环保):		名称		设计		日期																																																																			
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1	0.00	±0.03	2	0.03	0.05	3	0.1	0.05	4	0.05	0.05	5	1	5.1	数量	6	版本	7	页码	8	8	9	9																																																				
No.	修订内容	修订者	日期	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20																																																				

50307C

A		SPECIFICATION	
ITEM		Horizontal	
视场角 (FOV)	Vertical		
	Diagonal		
1、镜头参数			
1、芯片规格	= $1/2.7" (OV2710&OV2715)$		
2、焦距f	= 3.64 mm		
3、F/NO	= 2.4		
4、机械后焦	= 3.57 mm		
5、光学后焦	= 5.75 mm		
6、视场角(D)	= $120^\circ (H=100^\circ V=53^\circ)$		
7、T/V畸变	< -17%		
8、光轴畸变	< $H=32\% V=9\% D=46\%$		
9、螺纹	= M7*P0.35		
10、结构	= 5G+IR650		
11、像素	= 500万		
12、最大像面	= $\phi 7.2 \text{ mm}$		
13、CRA	= $20^\circ$		

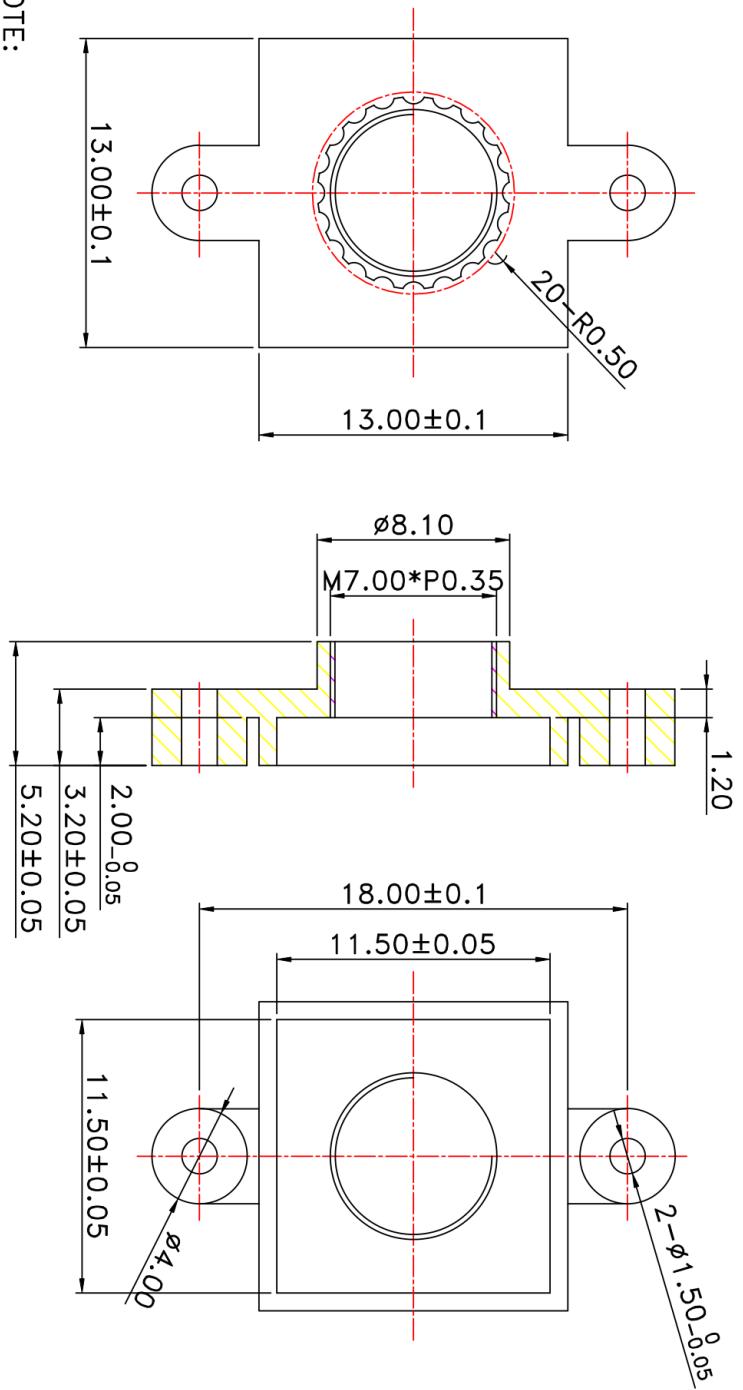
2、结构示意图：

## 2、结构示意图：

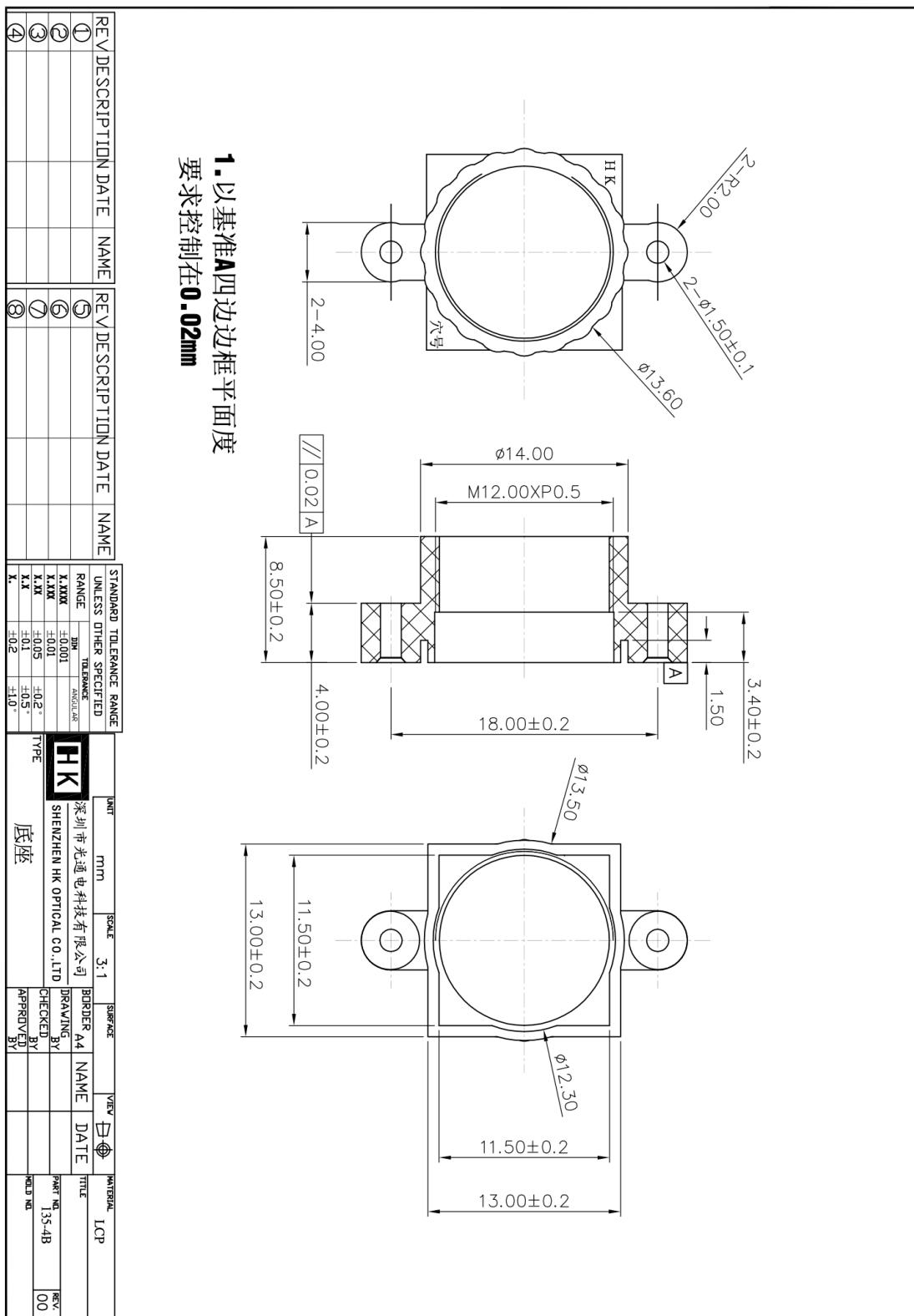
No.	修订内容	修订者	日期	单位	比例	数量	版本	页码	材料(环保):	
									名称	50307C 镜头规格仕样
1			0.00	0.03					设计	
2			0.0	0.05					校对	
3			0	0.1					审核	
			3		4	5	6	7	8	9 A4

**NOTE:**

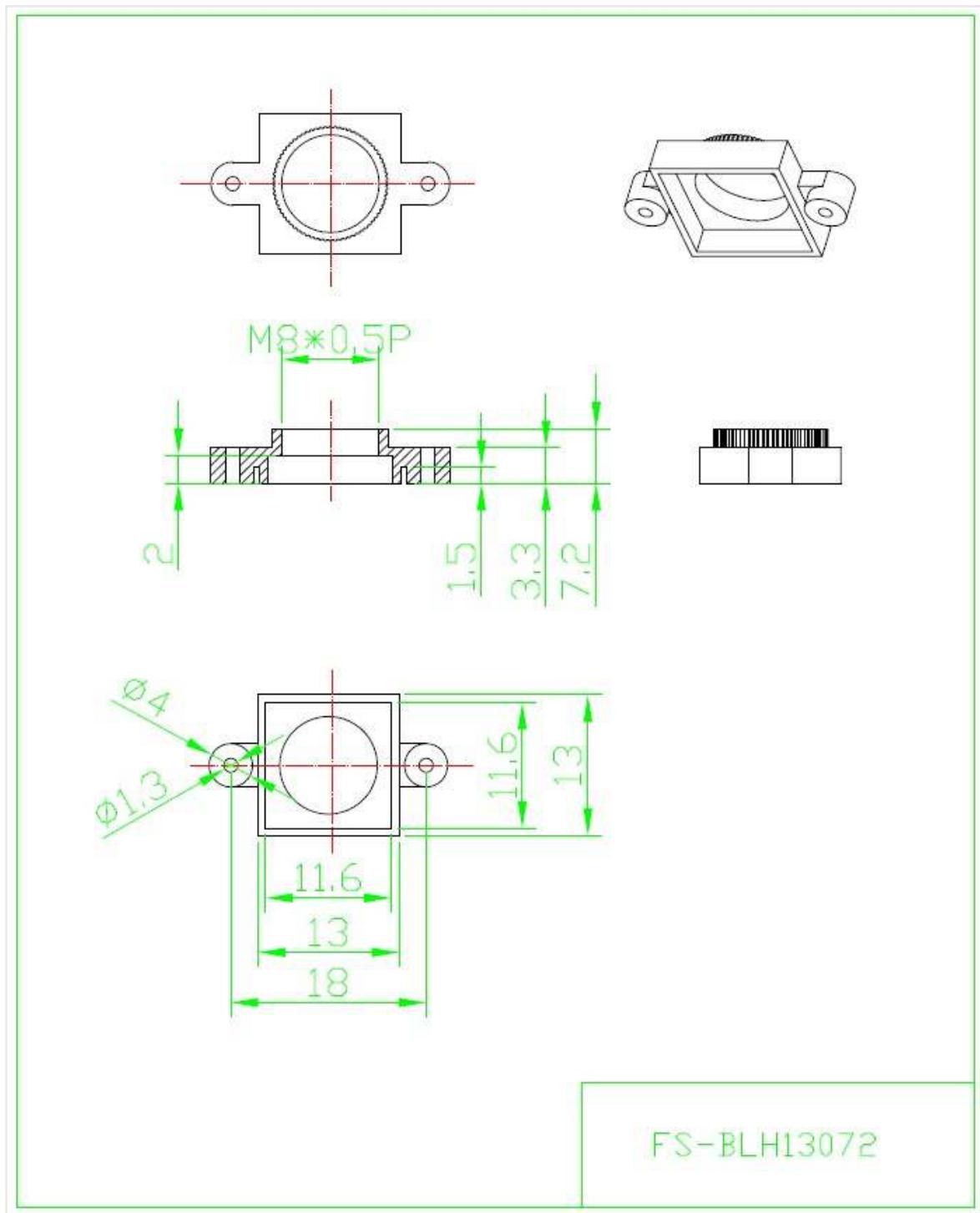
1. 未注倒角为R0.10;
  2. 分模面处不可有毛边;
  3. 剪口残留高度不可超出产品外径;
  4. 产品表面不可有伤痕、灰尘、油污、缩水、缺料等;
  5. 材质: PC+10GF, 不可使用二次料



**135-4B-WZ-LCP**



**BLH13072**



**CA5301A**

