

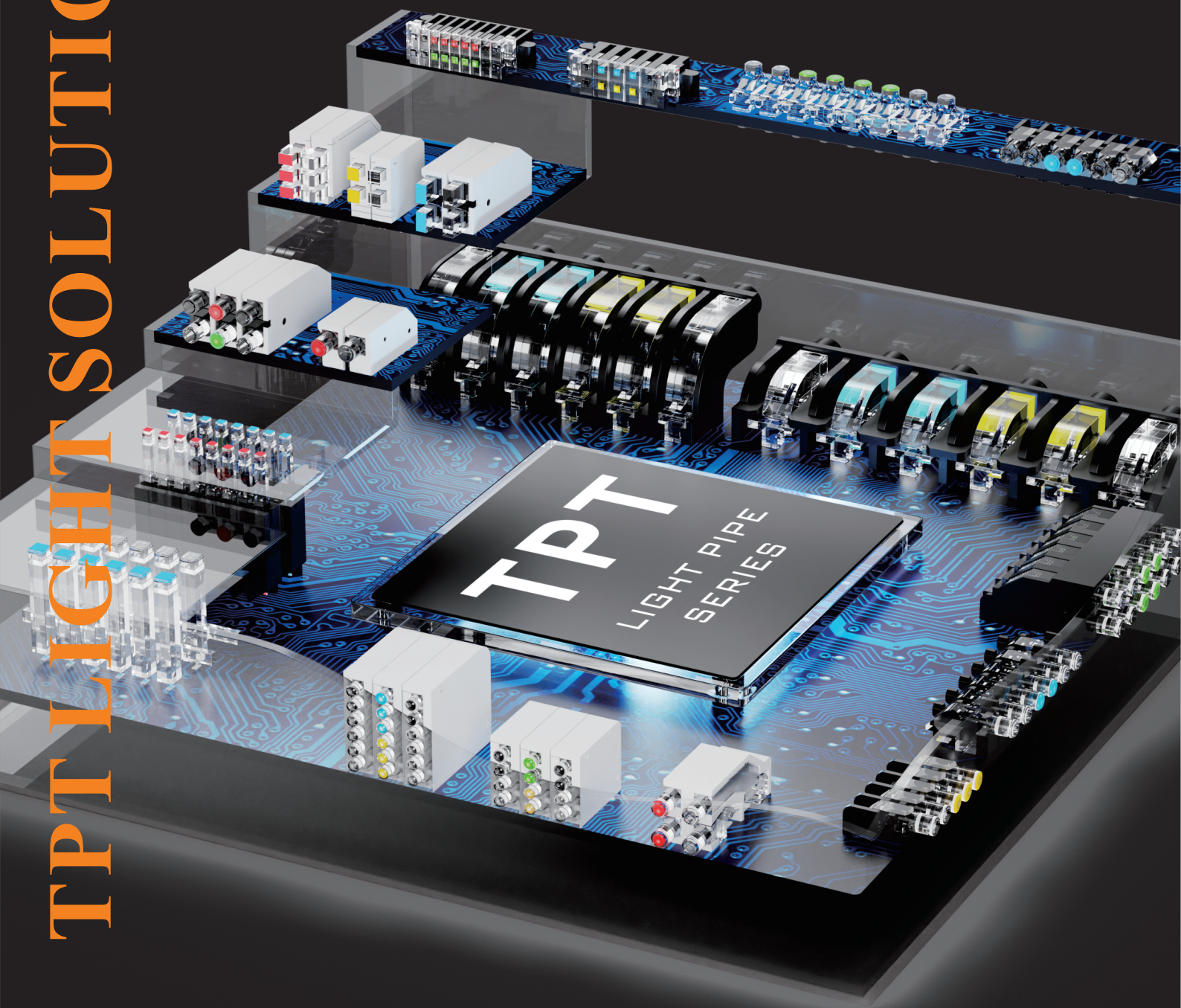
LIGHT PIPE

PRODUCT CATALOG



导光柱产品手册

TPT LIGHT SOLUTION



我们的使命：全心全意为客户服务！

我们的愿景：让友善的奋斗者得幸福！

我们的价值观：感恩-合作-精业-奉献！

Our Mission: To serve customers wholeheartedly!

Our Vision: To give employees a brighter future!

Our Values: Gratitude-Cooperation -Diligence-Dedication

SINCE
2009



ABOUT US

关于我们

四川腾华智控科技有限公司位于四川省成都市智能制造产业园，是一家专业从事研发、生产及销售电子产品的国家高新技术企业。可提供专业高效的电子产品研制和开发，包含：电子测试仪器、仪控设备、高可靠连接器、光电器件、安防设备、通信设备、电磁兼容设备、集成电路开发、软件编程等；公司已经自主研发开发了盒式机柜散热风扇、机场交通指挥棒、警用交通警示灯、隔离器、滤波器、LED导光器、不锈钢连接器、电源及光纤连接器等多个门类的产品，广泛应用于电力、冶金、化工、风力发电、轨道交通、核电军工等领域，部分产品远销欧美多国并在其军队和警察部门长期使用。

其中，我司自主研发设计的防串光导光柱系列产品，专门针对于仪控设备PCB板卡信号光源90度传导到设备面板而设计，产品具有上下左右不串光、支持任意间距的密集排布、寿命长、光损小、占用空间小且安装方便等显著优点，性能远远优于国内外同类产品，并获得国家发明专利认证。

TOPTEN TECH GROUP, located in Chengdu, China, is a national high-tech enterprise specializing in R&D, production and sales of electronic products. We can provide professional and efficient research and development of electronic products. We have independently developed a variety of products such as cooling fans, airport traffic baton, traffic warning lights, filters, LED light pipes and fiber optic connectors, which are widely used in electric power, chemical industry, wind power generation, railway system, etc. Some products are exported to many countries in Europe and USA, and have long been used in their military and police departments.

Our company's self-designed anti-crosstalk light pipe series has the advantages of no light leakage, anti-crosstalk, supporting any dense layout, long working life, high efficient light usage, easy installation and small volume. Our light pipes are far superior to similar products around the world, and have obtained the Chinese national invention patent certification.

R&D AND PRODUCTION

>>> 研发与生产

> 60 人

技术团队

500 万件

年产能

5000m²

源头工厂，企业占地面积5000m²





产品研发

模具设计

注塑
冲压

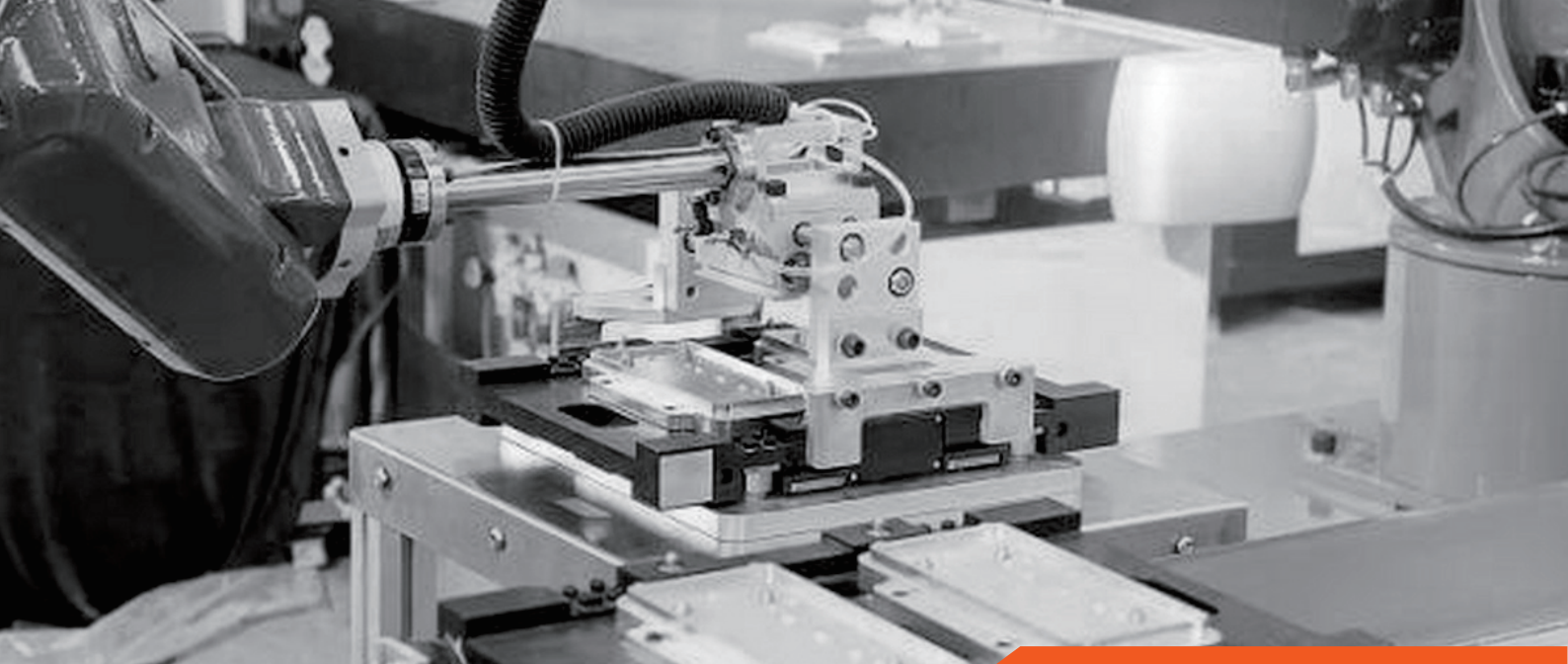
生产
装配

品质
检测

自动化的装配包装生产线
国际标准的生产管理

Automated assembly and packaging line
International standard production management





CERTIFICATIONS

荣誉资质 <<<

80⁺ 专利认证 Patents

20⁺ 各类认证 Certifications

RoHS

CE



ADVANTAGES

>>> 产品优势



工业控制
Industrial Control



航天航空
Aerospace



石油化工
Petrochemicals



轨道交通
Rail Traffic



电力电子
Electronics

发明专利

Invention Patent:

防串光导光柱，行业领先

Anti-crosstalk light guide,
industry-leading performance

节省空间

Space-Saving Design

密集排布，自由组合

Dense arrangement available
Flexible Combination

支持定制

Customization Support

快速响应，精准高效，
当日出图，一月出样

Precise execution, Drawings
released the same day; samples
ready in one month.

权威客户

Authoritative Clients

电力、铁路、石油、化工

Key industries served:
Power, Railway, Petro-
leum, Chemical.

卓越品质

Superior Quality

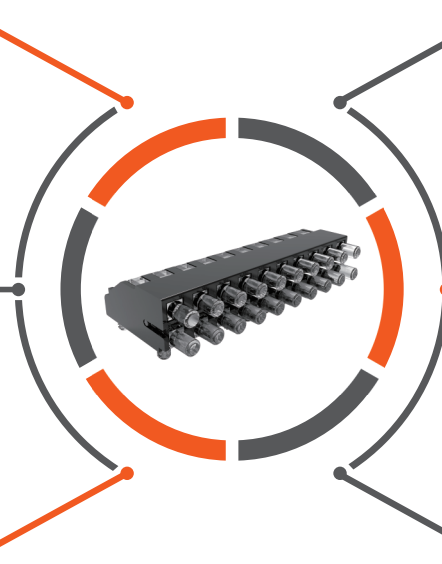
耐高低温、阻燃材料
安装便捷、柱脚稳固

H/L Temp. test, Flame-
retardant, Simple inst-
allation with a stable
column base


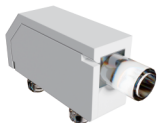





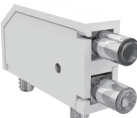
超长质保

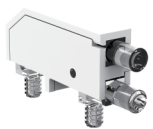
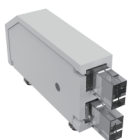

Extended Warranty

安全耐用，十年质保
Engineered for safety and
durability — backed by a
10-year warranty.

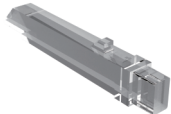







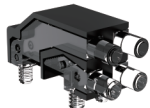


产品选型 SELECTION GUIDE

	型号 Model	通道数 Levels	位数 Arrays	柱脚 Legs	PCB安装孔 Mounting Hole	出光口尺寸 Head	页码 Page Number
	TAZ11	1	1	ø2.45mm	ø2.35-ø2.40mm	ø3.00×4.00mm	01
	TAZ12	1	1	ø2.45mm	ø2.35-ø2.40mm	ø3.00×4.00mm	02
	TAE11-XX	1	1~10	ø2.40mm	ø2.35mm	ø3.00×4.00mm	03
	TAE12-S1	1	1	ø2.45mm	ø2.35-ø2.40mm	ø3.00×4.00mm	05
	TAE12	1	1	ø2.35mm	ø2.30mm	ø3.00×4.50mm	06
	TAE11-02-R	1	2	ø2.40mm	ø2.35mm	ø3.00×4.00mm	07
	TAA11	2	1	ø2.35mm	ø2.30mm	ø3.00×4.50mm	08
	TAA12	2	1	ø2.35mm	ø2.30mm	ø3.00×4.50mm	09

	型号 Model	通道数 Levels	位数 Arrays	柱脚 Legs	PCB安装孔 Mounting Hole	出光口尺寸 Head	页码 Page Number
	TAA11-S1	2	1	ø2.45mm	ø2.35-ø2.40mm	ø3.00×4.00mm	10
	TAA12-S1	2	1	ø2.45mm	ø2.35-ø2.40mm	ø3.00×4.00mm	11
	TAA11-R	2	1	ø2.35mm	ø2.30mm	ø3.00×4.50mm	12
	TAA13	2	1	Δ1.40mm	ø1.50mm	2.50×2.50 ×2.13mm	13
	TAA21	2	1	ø2.35mm	ø2.30mm	4.50×2.00 ×3.50mm	14
	TAD12-XX -S1	2	2~10	ø2.45mm	ø2.40mm	ø3.00×4.00mm	15
	TAD14-XX -S1	2	2~10	ø2.45mm	ø2.40mm	ø3.00×4.00mm	17
	TAD15	18	/	ø2.45mm	ø2.40mm	1.20×1.20mm	19
	TAD16	10	/	ø2.45mm	ø2.40mm	1.20×1.20mm	20

	型号 Model	通道数 Levels	位数 Arrays	柱脚 Legs	PCB安装孔 Mounting Hole	出光口尺寸 Head	页码 Page Number
	TAJ11	3	1	ø2.45mm Δ1.40mm	ø2.35-ø2.40mm ø1.50mm	5.50×2.73 ×1.93mm	21
	TAJ12	3	1	ø2.50mm	ø2.40mm	ø3.00×4.5mm	22
	TAC11	4	1	Δ1.40mm	ø1.50mm	ø2.00×2.40mm	23
	TAC12	4	1	ø2.50mm	ø2.40mm	ø3.00×4.5mm	24
	TAG11	6	1	Δ1.40mm	ø1.50mm	ø2.00×2.40mm	25
	TO4U-MB -01	1~18	/	/	/	3.50×2.00mm	26
	TO5U-MB -01	1~18	/	/	/	3.50×2.00mm	27
	TO6U-MB -01	1~36	/	/	/	3.50×2.00mm	28

	型号 Model	通道数 Levels	位数 Arrays	柱脚 Legs	PCB安装孔 Mounting Hole	出光口尺寸 Head	页码 Page Number
	TOXU-MB -02	1	/	/	/	3.50×2.00mm	29
	TAF-V-L-XX	1	/	/	/	ø1.40×1.40mm	30
	TAF-11	6	/	/	/	ø2.60×2.60mm	31
	TAF12	1	1	ø2.50mm	ø2.40-ø2.45mm	ø3.00×5.50mm	32
	TAF12-001ZS	1	1	ø2.50mm	ø2.40-ø2.45mm	ø3.00×6.60mm	33
	TAD13-05-S1	2	5	ø2.45mm	ø2.40mm	ø3.00×4.00mm	34
	TAD17	1	6	ø2.55mm	ø2.50mm	ø6.30×2.90mm	35
	TAD18	1	6	ø2.55mm	ø2.50mm	ø6.30×4.00mm	36
	TAD19	2	2	ø2.35mm	ø2.30mm	ø3.00×4.50mm	37

LED封装规格

Recommended LED Package Specifications

Code	LED Package	Typical Size (mm)	Code	LED Package	Typical Size (mm)
T1	0201 SMT	0.6 × 0.3	L1	3528 PLCC-2	approx.3.5 × 2.8 mm
T2	0402 SMT	1.0 × 0.5	L2	3228 PLCC-4	approx.3.2 × 2.8 mm
T3	0603 SMT	1.6 × 0.8			
T4	0805 SMT	2.0 × 1.25			
T5	1206 SMT	3.2 × 1.6			
T6	1210 SMT	3.2 × 2.5			
T7	1806 SMT	4.5 × 1.6			
T8	1812 SMT	4.5 × 3.2			
T9	2010 SMT	5.0 × 2.5			
T10	2512 SMT	6.3 × 3.2			

详细对比

Detailed Comparison: SMT vs. PLCC Packages

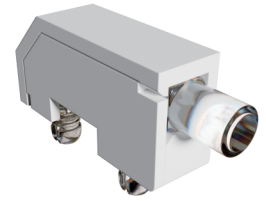
特性 Characteristic	表面贴装 LED SMT LED	塑封无引线芯片载体 LED PLCC LED
物理尺寸 Physical Size	封装紧凑，占板面积小， 适用于高密度PCB布局 Compact package with minimal board footprint, suitable for high-density PCB layouts.	封装尺寸较大，需要更多PCB安装空间 Larger package size requiring more PCB mounting space.
高度规格 Height Profile	超低高度，适合空间受限设计 Ultra-low profile, ideal for space-constrained designs	含透镜通封装高度较高， 适合对亮度和可视性要求更高的应用 Higher package profile, suitable for applications with greater brightness and visibility requirements.
光学性能 Optical Efficiency	小发光面有利于与紧凑型导光柱实现精确耦合， 适合高密度指示布局，但对装配精度要求较高 The small emitting surface supports precise coupling with compact light guides and is well suited for high-density indication layouts, although it generally requires tighter assembly accuracy	较大发光面通常带来更宽松的对位容差，并可支持更高光输出，但在紧凑型、高密度导光柱布局中空间利用率较低 The larger emitting surface generally allows more forgiving alignment tolerance and can support higher light output, but is less space-efficient in compact, high-density light guide layouts.
热性能 Thermal Performance	热容量较小，依赖 PCB 散热； 持续高功率驱动时需谨慎 Smaller thermal mass; relies on PCB for heat dissipation. Caution advised for sustained high-power drive.	封装本体散热性能更优，通常可承受更高的驱动电流 Better thermal dissipation from the package body; can generally handle higher drive currents.
典型应用 Typical Application	空间受限、高密度的状态指示、 键盘背光、便携设备 Space-constrained, high-density status indication, keyboard backlighting, portable devices.	对亮度要求严苛的应用场景：电源指示灯、 大型 LOGO 照明、需要宽视角的场景 Brightness-critical applications: power indicators, large logo illumination, situations requiring wide viewing angles or high drive currents.

备注与建议：本页面所提供的封装尺寸、特性对比及选型建议，均基于通用工程知识及典型应用工况制定。

Notes & Recommendations: The package dimensions, characteristic comparisons, and selection advice provided on this page are based on general engineering knowledge for typical application conditions.

单通道导光柱

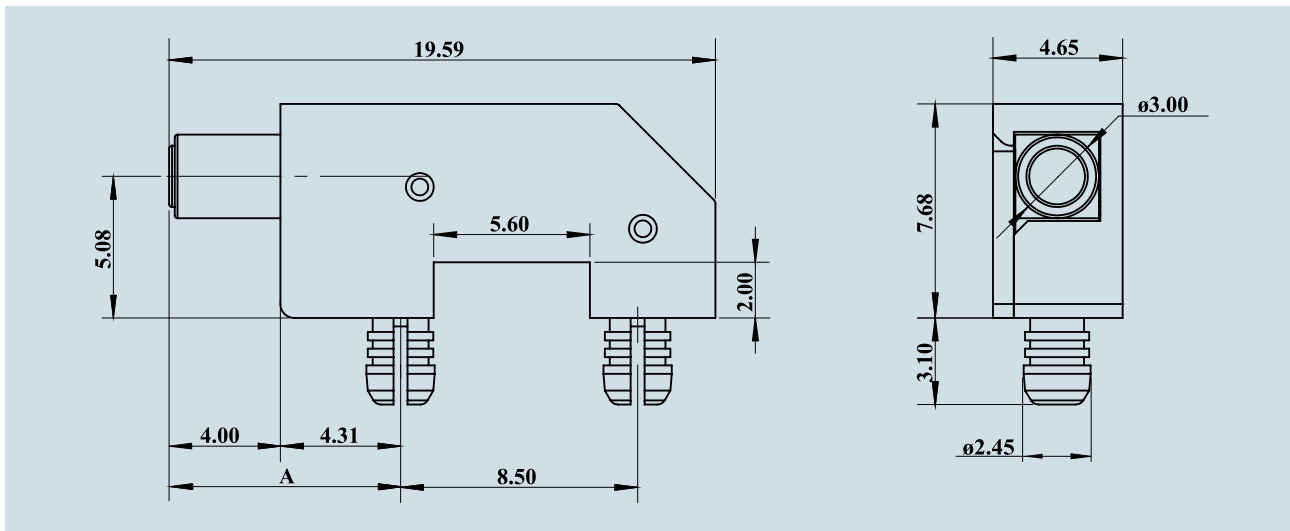
1-LEVEL LIGHT PIPE / TAZ11



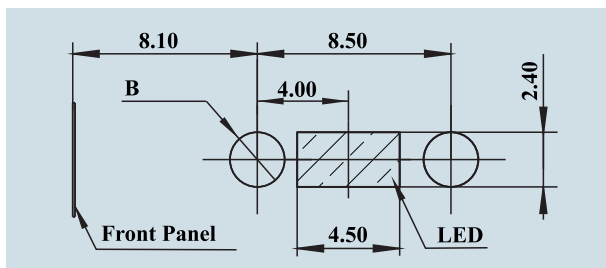
产品参数 SPECIFICATIONS

产品型号	TAZ11	Model	TAZ11
外壳材料	PC+ABS	Shield Material	PC+ABS
导光体材料	PC	Pipe Material	PC
PCB开孔建议	ø2.35-2.40mm	PCB Mounting Hole	ø2.35-2.40mm
光源建议	< 1206	LED Suggestion	< 1206
工作温度	-40°C~+90°C	Ambient Temperature	-40°C~+90°C

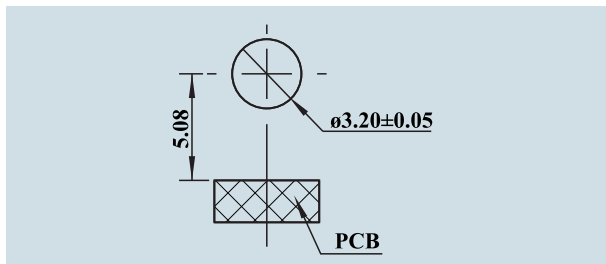
产品尺寸 OUTLINE DRAWING



Outline Drawing



PCB Layout Suggestion Non-Plated Through Hole (NPTH)

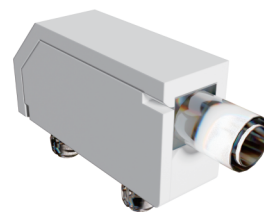


Front Panel Suggestion

A	Recommended LEDs	
8.31	T4~T6	
B	1.6 mm PCB	2.0 mm PCB
	ø2.35 ± 0.02	ø2.40 ⁺⁰ _{-0.02}

单通道导光柱

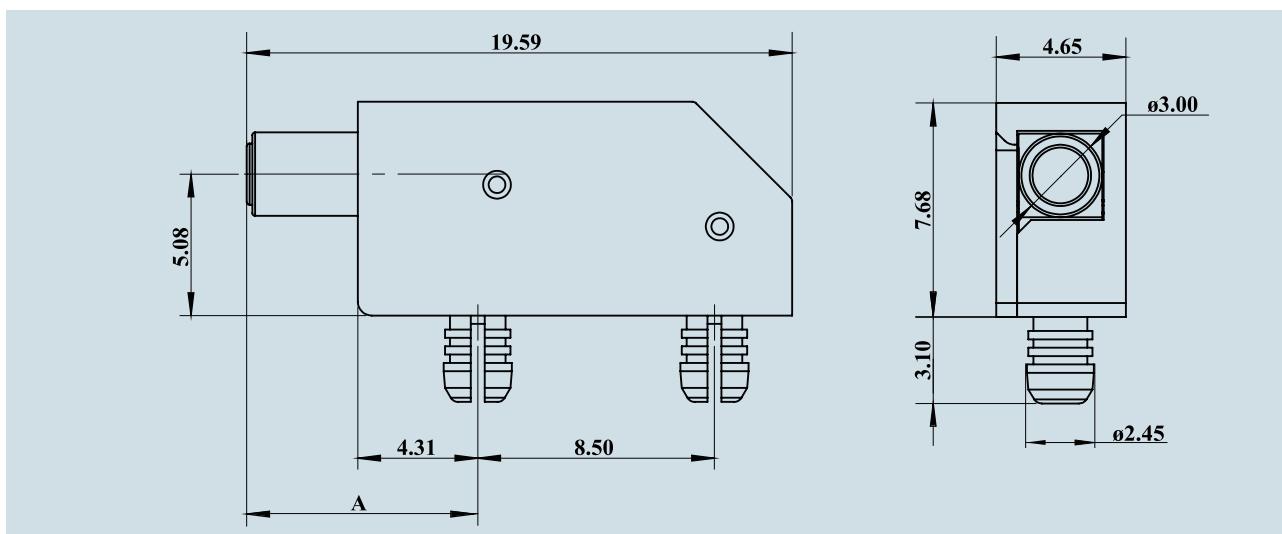
1-LEVEL LIGHT PIPE / TAZ12



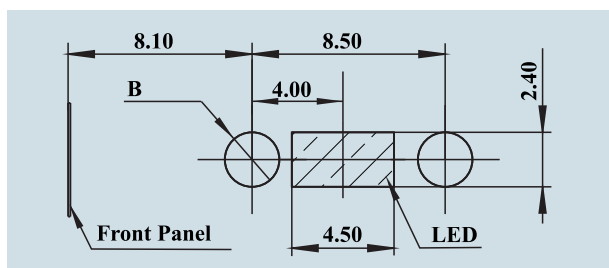
产品参数 SPECIFICATIONS

产品型号	TAZ12	Model	TAZ12
外壳材料	PC+ABS	Shield Material	PC+ABS
导光体材料	PC	Pipe Material	PC
PCB开孔建议	ø2.35-2.40mm	PCB Mounting Hole	ø2.35-2.40mm
光源建议	< 1206	LED Suggestion	< 1206
工作温度	-40°C~+90°C	Ambient Temperature	-40°C~+90°C

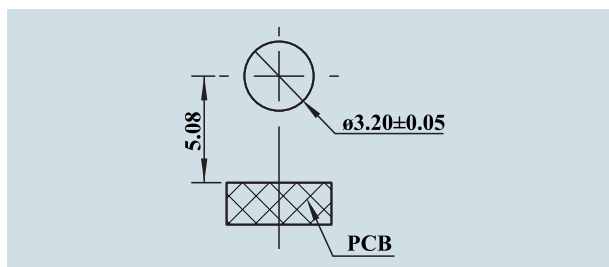
产品尺寸 OUTLINE DRAWING



Outline Drawing



PCB Layout Suggestion



Front Panel Suggestion

A	Recommended LEDs
8.31	T4~T6

B	1.6 mm PCB	2.0 mm PCB
	ø2.35 ± 0.02	ø2.40 ⁺⁰ _{-0.02}

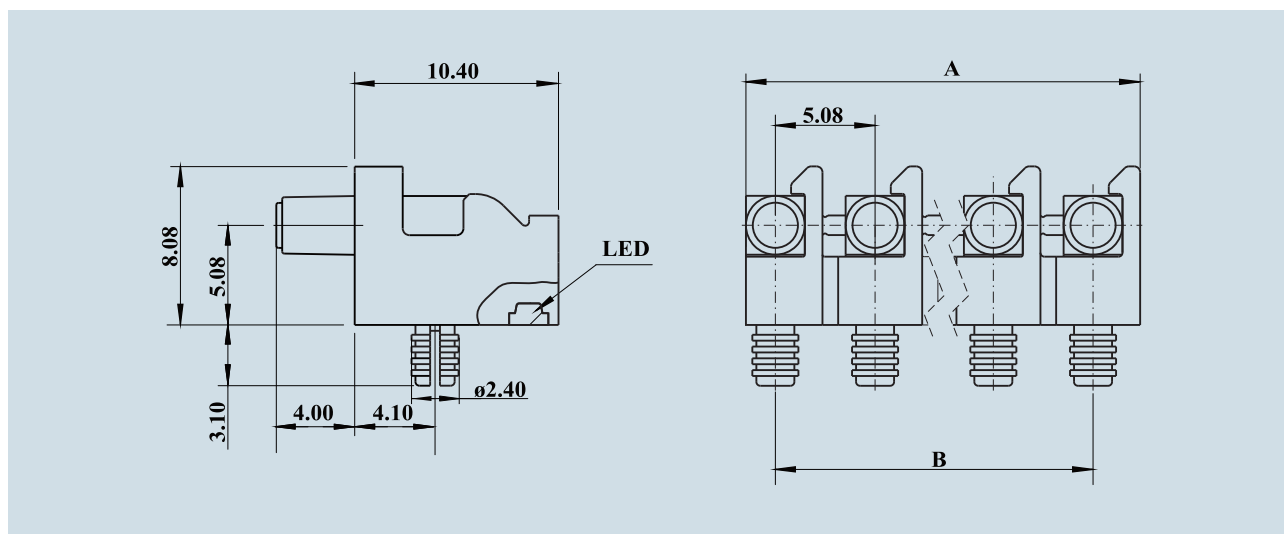
单通道并排导光柱

MULTI-1-LEVEL LIGHT PIPE TAE11-XX

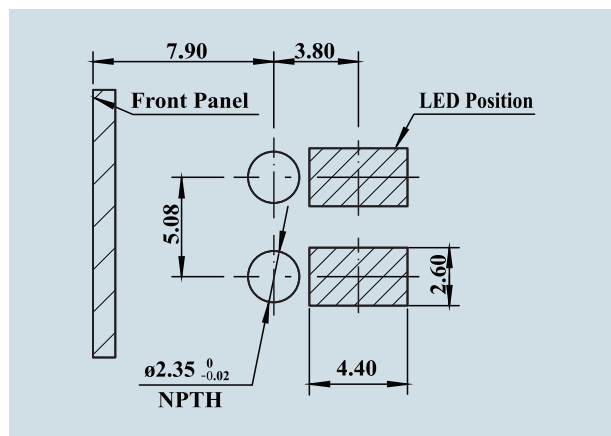


产品参数 SPECIFICATIONS

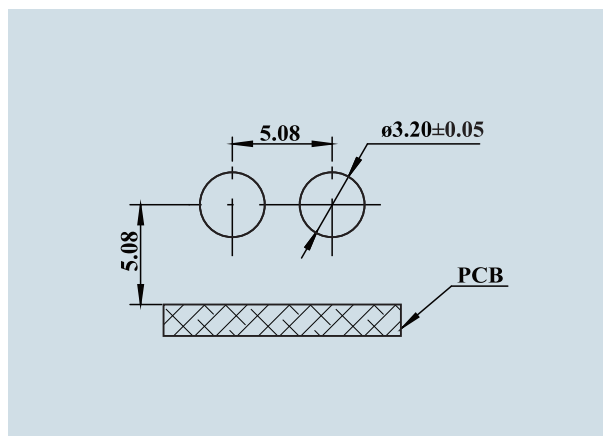
产品型号	TAE11-XX	Model	TAE11-XX
外壳材料	PA66	Shield Material	PA66
导光体材料	PC	Pipe Material	PC
PCB开孔建议	ø2.35mm	PCB Mounting Hole	ø2.35mm
光源建议	L×W×H < 4.40×2.60×2.20mm	LED Suggestion	L×W×H < 4.40×2.60×2.20mm
工作温度	-40°C~+90°C	Ambient Temperature	-40°C~+90°C



Outline Drawing



PCB Layout Suggestion



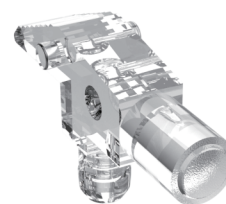
Front Panel Suggestion

	产品型号 Model	位数 Arrays	A	B
	TAE11-01	1	3.00	/
	TAE11-02	2	10.16	5.08
	TAE11-03	3	15.24	10.16
	TAE11-04	4	20.32	15.24
	TAE11-05	5	25.40	20.32
	TAE11-06	6	30.48	25.40
	TAE11-07	7	35.56	30.48
	TAE11-08	8	40.64	35.56
	TAE11-09	9	45.72	40.64
	TAE11-10	10	49.62	45.72

*适用灯珠封装 Suitable LED types: 0603、0805、1204、1206、3528

单通道导光柱

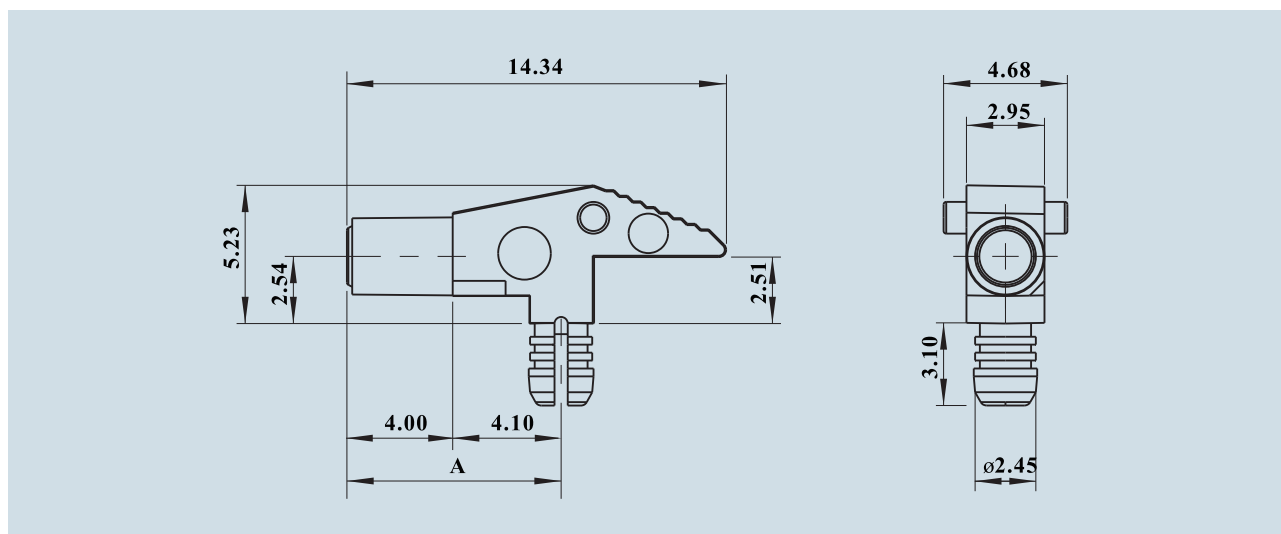
1-LEVEL LIGHT PIPE / TAE12-S1



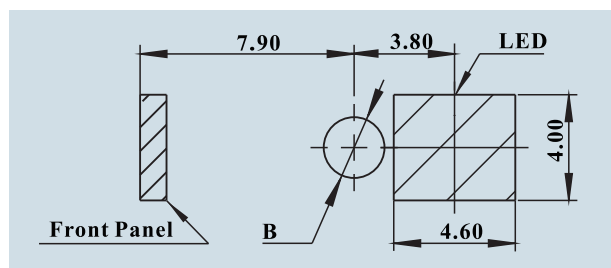
产品参数 SPECIFICATIONS

产品型号	TAE12-S1	Model	TAE12-S1
外壳材料	PC+ABS	Shield Material	PC+ABS
导光体材料	PC	Pipe Material	PC
PCB开孔建议	ø2.35-2.40mm	PCB Mounting Hole	ø2.35-2.40mm
光源建议	L×W×H < 4.60×4.00×2.20mm	LED Suggestion	L×W×H < 4.60×4.00×2.20mm
工作温度	-40°C~+90°C	Ambient Temperature	-40°C~+90°C

产品尺寸 OUTLINE DRAWING

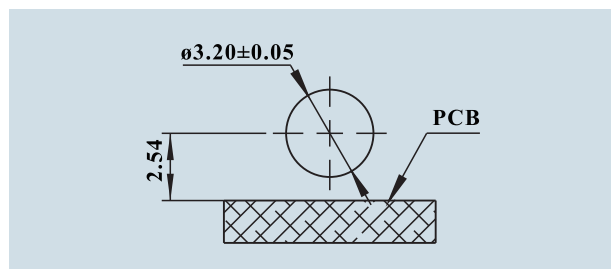


Outline Drawing



PCB Layout Suggestion

A	Recommended LEDs	
8.10	T4~T7; L1~L2	
B	1.6 mm PCB	2.0 mm PCB
	ø2.35±0.02	ø2.40 ⁺⁰ _{-0.02}

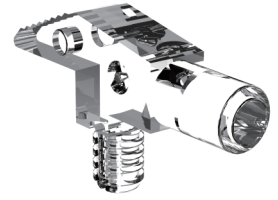


Front Panel Suggestion

单通道导光柱

1-LEVEL LIGHT PIPE

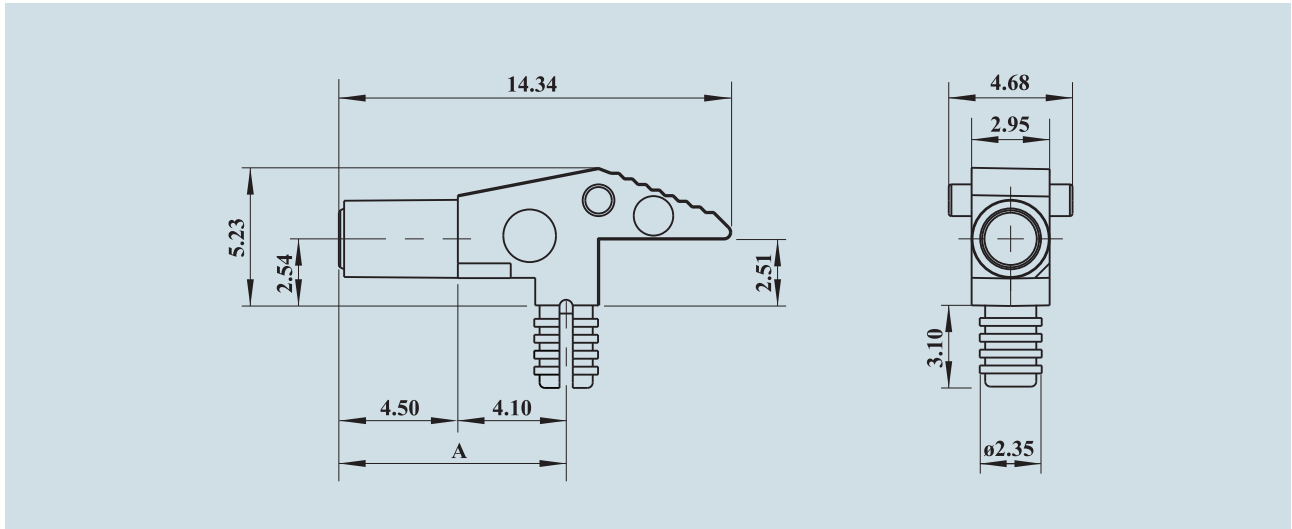
TAE12



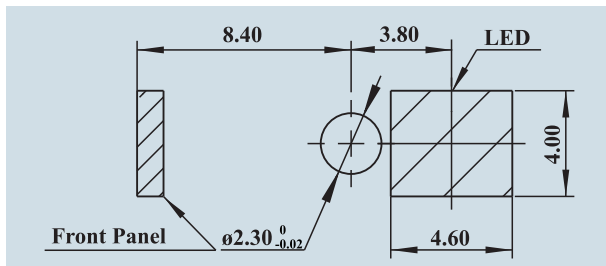
产品参数 SPECIFICATIONS

产品型号	TAE12	Model	TAE12
外壳材料	/	Shield Material	/
导光体材料	PC	Pipe Material	PC
PCB开孔建议	ø2.30mm	PCB Mounting Hole	ø2.30mm
光源建议	L×W×H < 4.60×4.00×2.20mm	LED Suggestion	L×W×H < 4.60×4.00×2.20mm
工作温度	-40°C~+90°C	Ambient Temperature	-40°C~+90°C

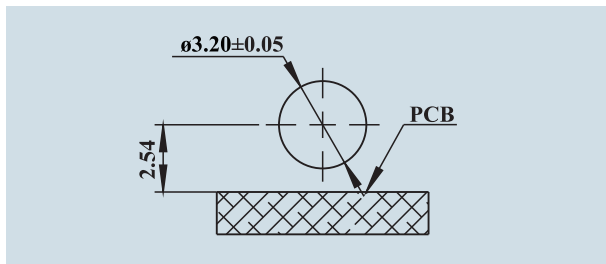
产品尺寸 OUTLINE DRAWING



Outline Drawing



PCB Layout Suggestion



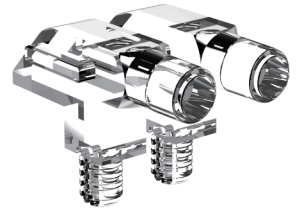
Front Panel Suggestion

A	Recommended LEDs
8.60	T4~T7; L1~L2

单通道并排导光柱

2-ARRAY LIGHT PIPE

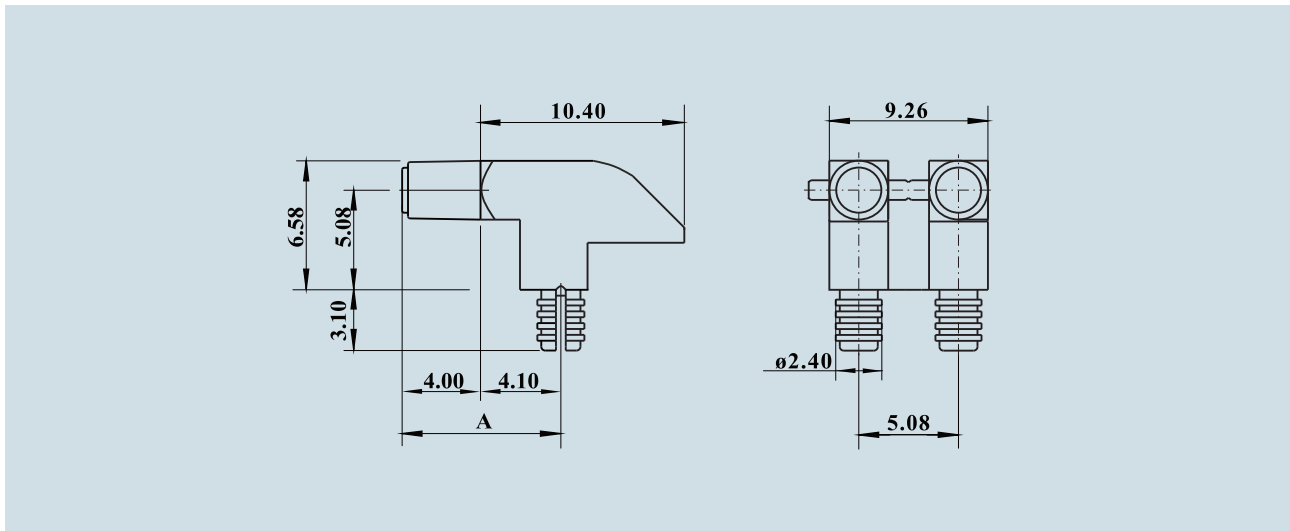
TAE11-02-R



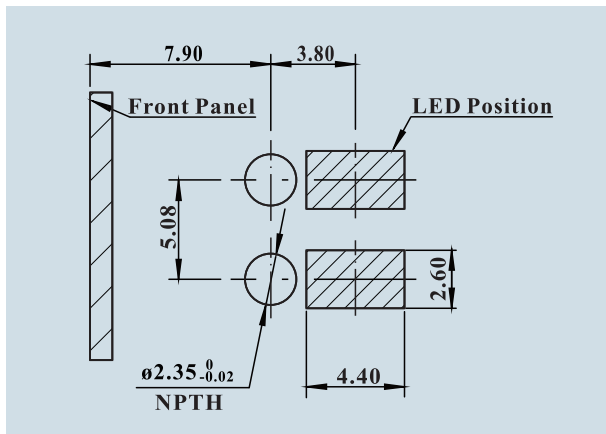
产品参数 SPECIFICATIONS

产品型号	TAE11-02-R	Model	TAE11-02-R
外壳材料	/	Shield Material	/
导光体材料	PC	Pipe Material	PC
PCB开孔建议	ø2.35mm	PCB Mounting Hole	ø2.35mm
光源建议	L×W×H < 4.40×2.60×2.20mm	LED Suggestion	L×W×H < 4.40×2.60×2.20mm
工作温度	-40°C~+90°C	Ambient Temperature	-40°C~+90°C

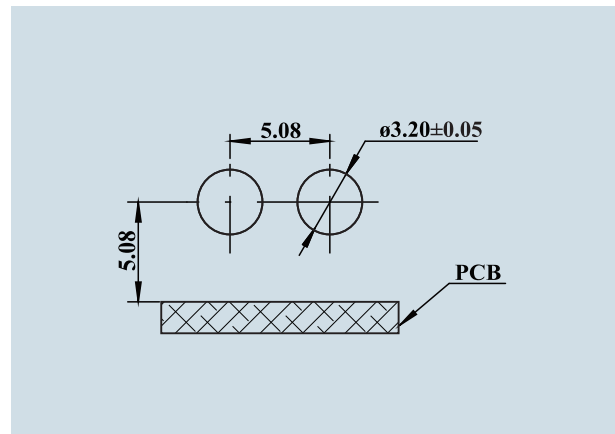
产品尺寸 OUTLINE DRAWING



Outline Drawing



PCB Layout Suggestion

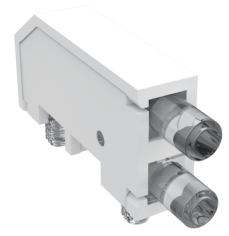


Front Panel Suggestion

A	Recommended LEDs
8.10	T6~T10

双通道导光柱

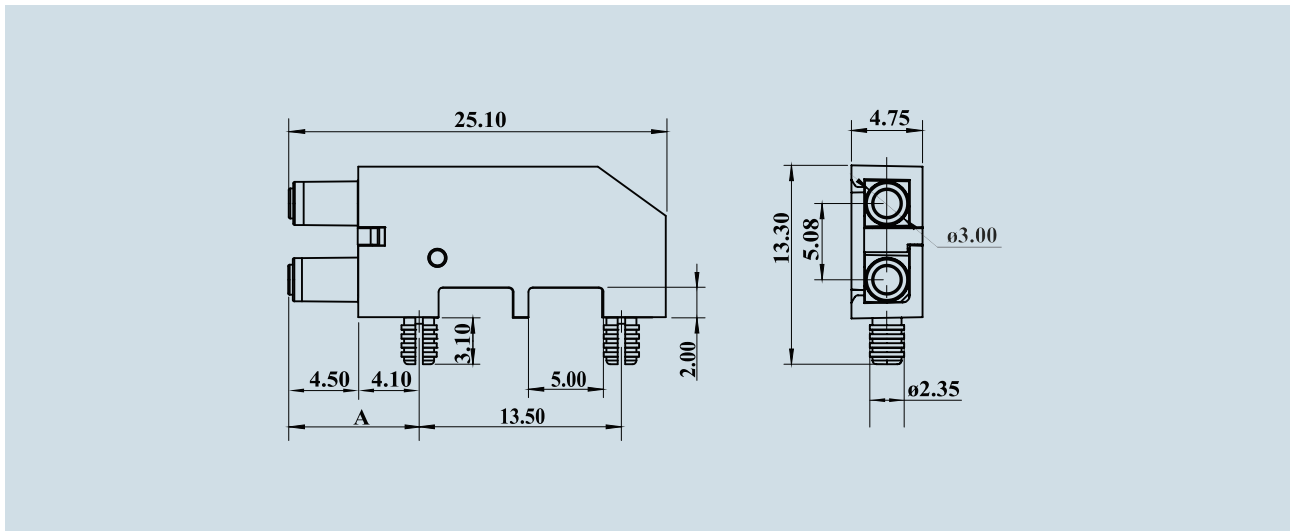
2-LEVEL LIGHT PIPE / TAA11



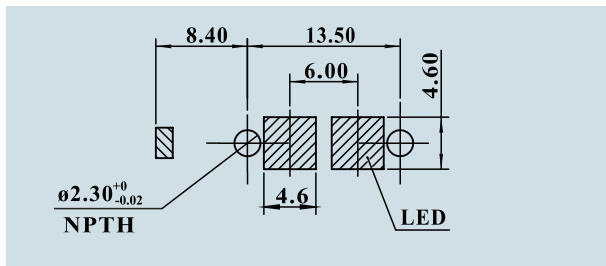
产品参数 SPECIFICATIONS

产品型号	TAA11	Model	TAA11
外壳材料	PC+ABS	Shield Material	PC+ABS
导光体材料	PC	Pipe Material	PC
PCB开孔建议	ø2.30mm	PCB Mounting Hole	ø2.30mm
光源建议	L×W×H < 4.60×4.60×2.20mm	LED Suggestion	L×W×H < 4.60×4.60×2.20mm
工作温度	-40°C~+90°C	Ambient Temperature	-40°C~+90°C

产品尺寸 OUTLINE DRAWING

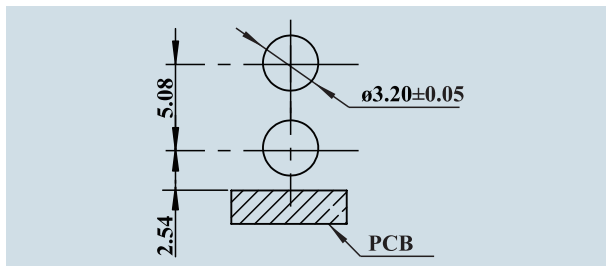


Outline Drawing



PCB Layout Suggestion

A	Recommended LEDs
8.60	T5~T7

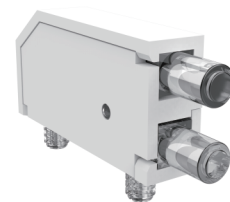


Front Panel Suggestion

双通道导光柱

2-LEVEL LIGHT PIPE

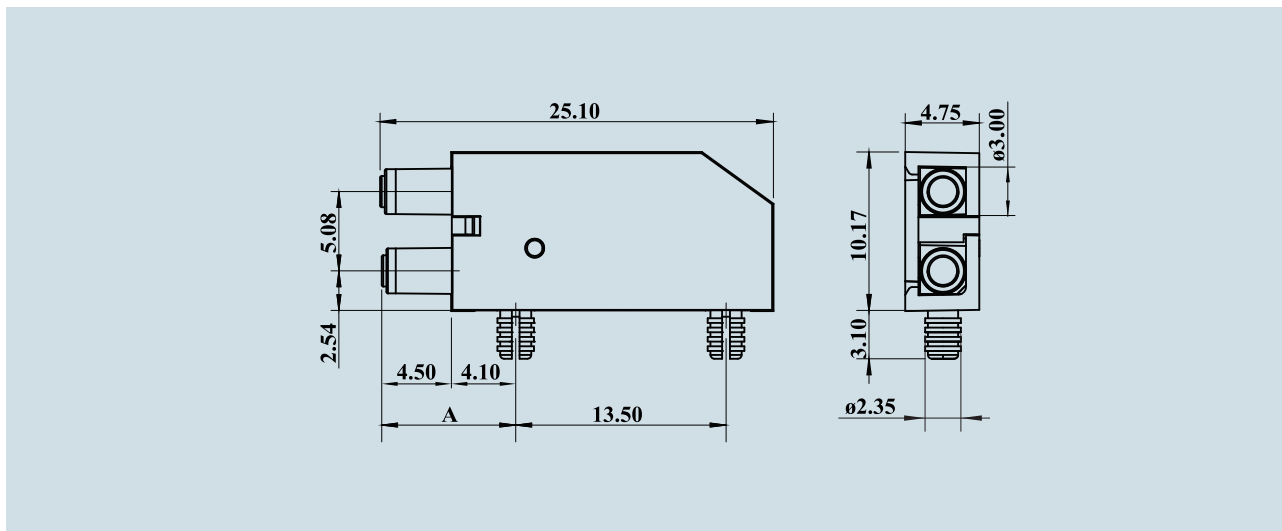
TAA12



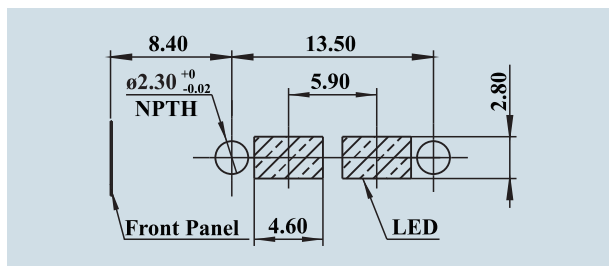
产品参数 SPECIFICATIONS

产品型号	TAA12	Model	TAA12
外壳材料	PC+ABS	Shield Material	PC+ABS
导光体材料	PC	Pipe Material	PC
PCB开孔建议	ø2.30mm	PCB Mounting Hole	ø2.30mm
光源建议	L×W×H < 4.60×2.80×2.20mm	LED Suggestion	L×W×H < 4.60×2.80×2.20mm
工作温度	-40°C~+90°C	Ambient Temperature	-40°C~+90°C

产品尺寸 OUTLINE DRAWING

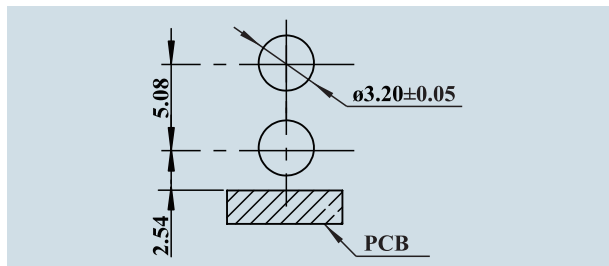


Outline Drawing



PCB Layout Suggestion

A	Recommended LEDs
8.60	T4~T7; L1~L2

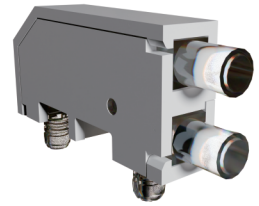


Front Panel Suggestion

双通道导光柱

2-LEVEL LIGHT PIPE

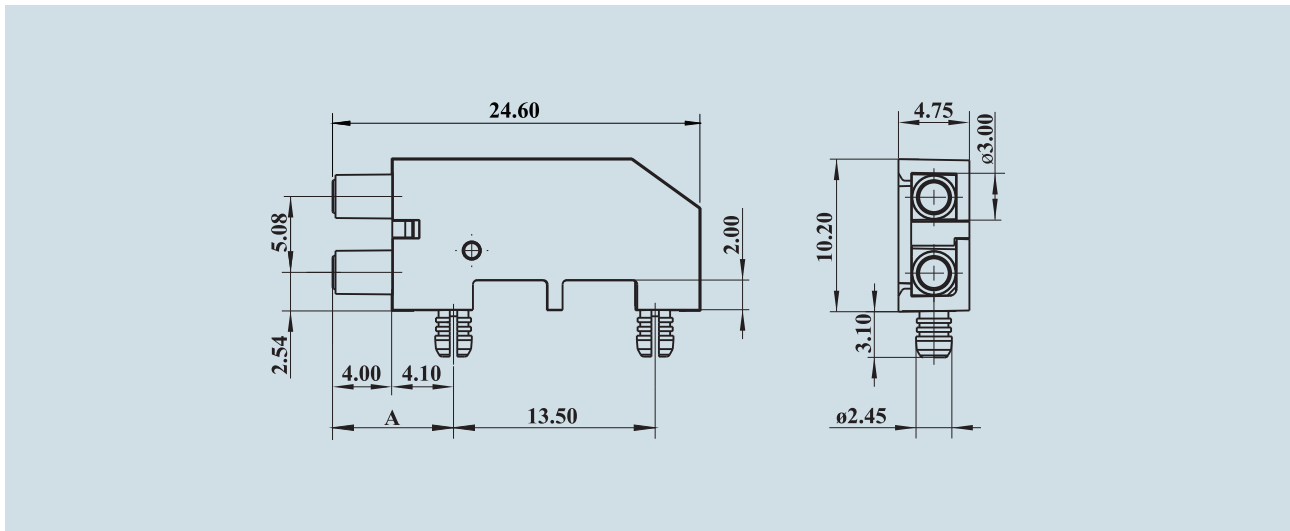
TAA11-S1



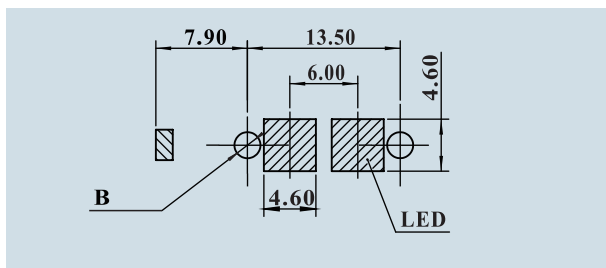
产品参数 SPECIFICATIONS

产品型号	TAA11-S1	Model	TAA11-S1
外壳材料	PC+ABS	Shield Material	PC+ABS
导光体材料	PC	Pipe Material	PC
PCB开孔建议	ø2.35-2.40mm	PCB Mounting Hole	ø2.35-2.40mm
光源建议	L×W×H<4.60×4.60×2.20mm	LED Suggestion	L×W×H<4.60×4.60×2.20mm
工作温度	-40°C~+90°C	Ambient Temperature	-40°C~+90°C

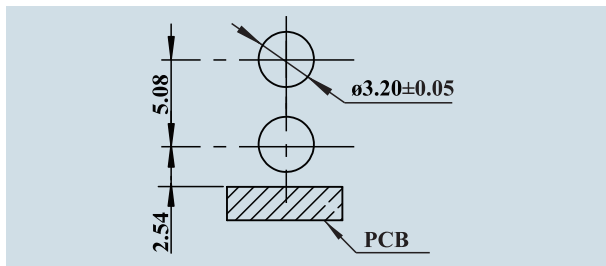
产品尺寸 OUTLINE DRAWING



Outline Drawing



PCB Layout Suggestion



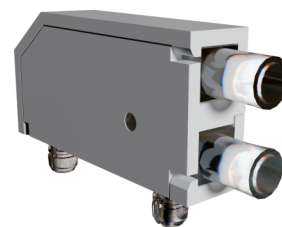
Front Panel Suggestion

A	Recommended LEDs	
8.10	T5~T6	
B	1.6mm PCB	2.0mm PCB
	ø2.35±0.02	ø2.40 ⁺⁰ _{-0.02}

双通道导光柱

2-LEVEL LIGHT PIPE

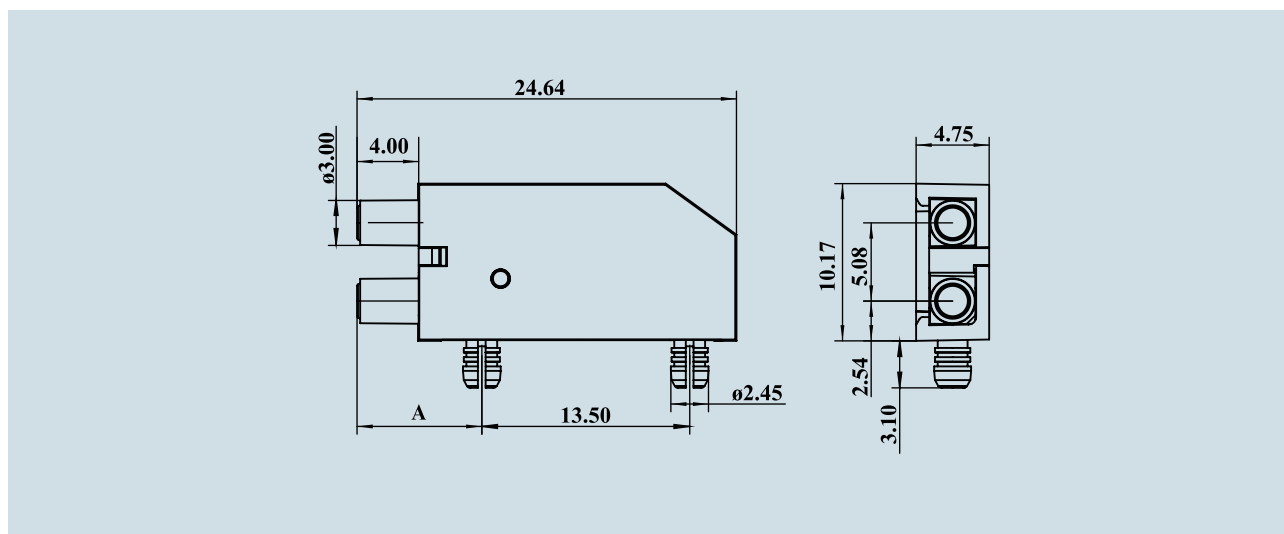
TAA12-S1



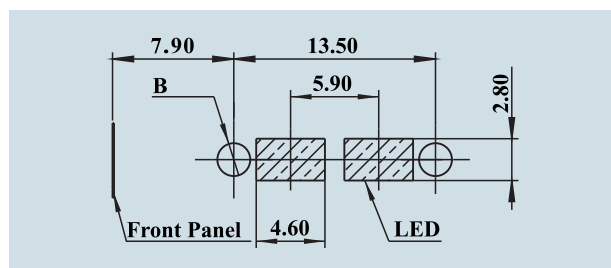
产品参数 SPECIFICATIONS

产品型号	TAA12-S1	Model	TAA12-S1
外壳材料	PC+ABS	Shield Material	PC+ABS
导光体材料	PC	Pipe Material	PC
PCB开孔建议	ø2.35-2.40mm	PCB Mounting Hole	ø2.35-2.40mm
光源建议	L×W×H<4.60×2.80×2.20mm	LED Suggestion	L×W×H<4.60×2.80×2.20mm
工作温度	-40°C~+90°C	Ambient Temperature	-40°C~+90°C

产品尺寸 OUTLINE DRAWING

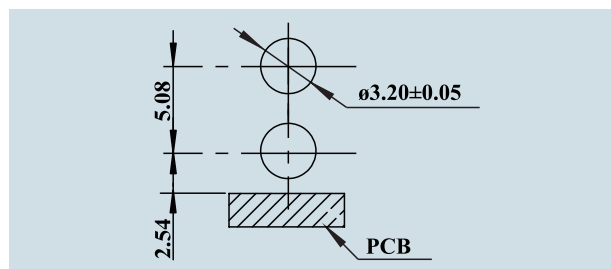


Outline Drawing



PCB Layout Suggestion

A	Recommended LEDs	
8.10	T5~T6	
B	1.6mm PCB	2.0mm PCB
	ø2.35±0.02	ø2.40 ⁺⁰ _{-0.02}

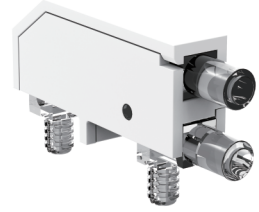


Front Panel Suggestion

双通道导光柱

2-LEVEL LIGHT PIPE

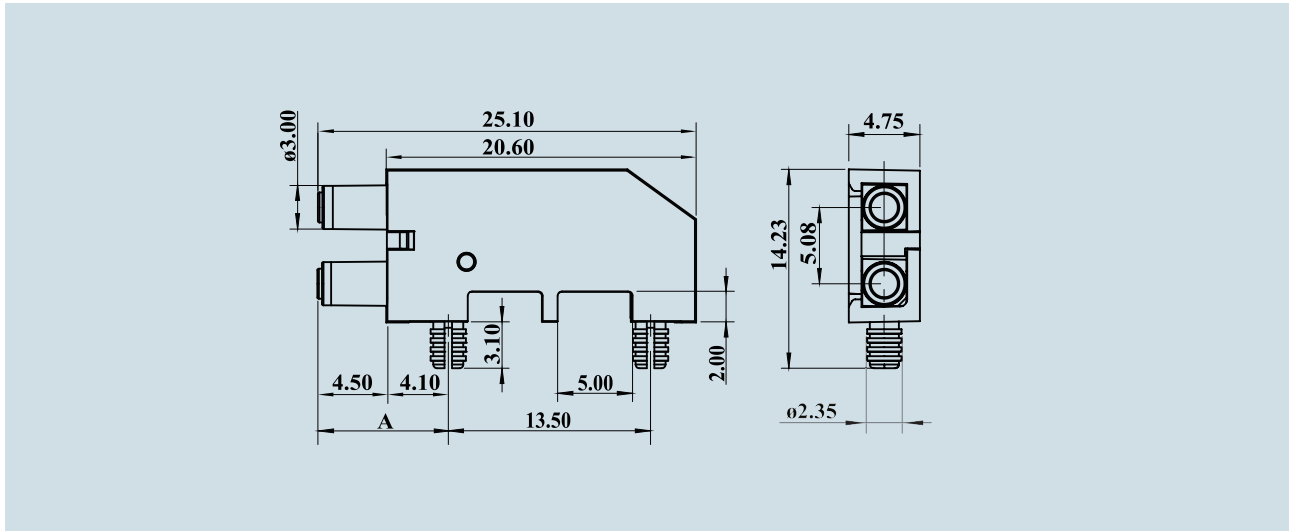
TAA11-R



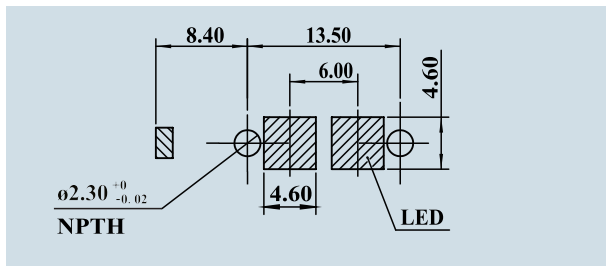
产品参数 SPECIFICATIONS

产品型号	TAA11-R	Model	TAA11-R
外壳材料	PC+ABS	Shield Material	PC+ABS
导光体材料	PC	Pipe Material	PC
PCB开孔建议	ø2.30mm	PCB Mounting Hole	ø2.30mm
光源建议	L×W×H<4.60×4.60×2.20mm	LED Suggestion	L×W×H<4.60×4.60×2.20mm
工作温度	-40°C~+90°C	Ambient Temperature	-40°C~+90°C

产品尺寸 OUTLINE DRAWING

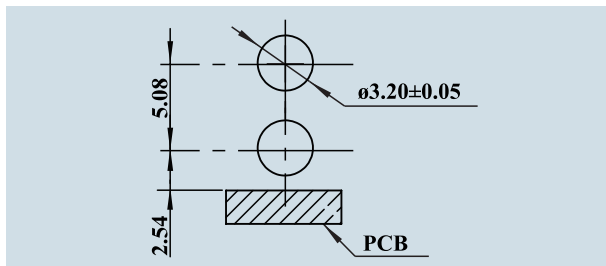


Outline Drawing



PCB Layout Suggestion

A	Recommended LEDs
8.60	T5~T7



Front Panel Suggestion

双通道方口导光柱

2-LEVEL LIGHT PIPE

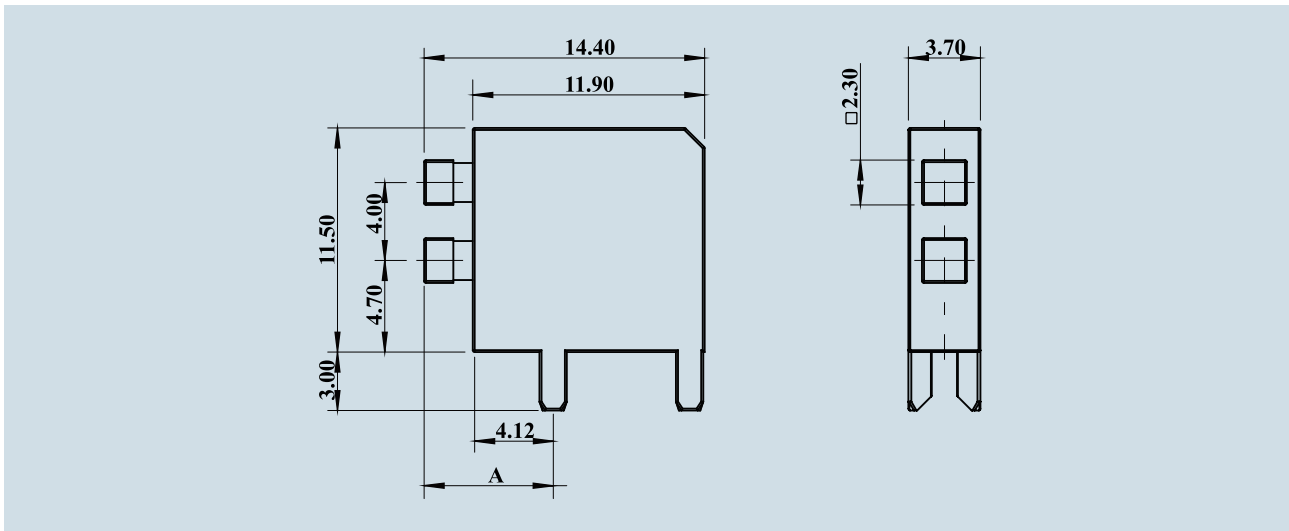
TAA13



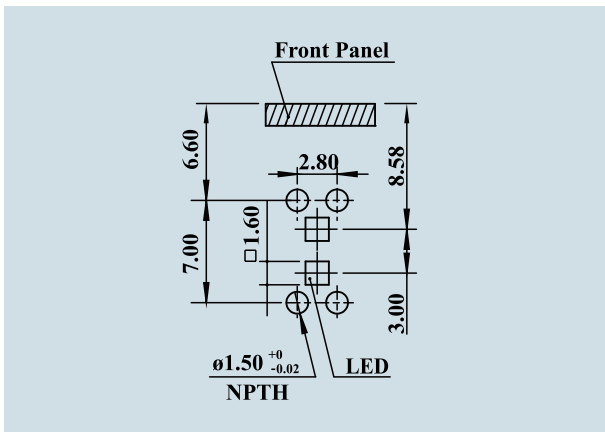
产品参数 SPECIFICATIONS

产品型号	TAA13	Model	TAA13
外壳材料	PC+ABS	Shield Material	PC+ABS
导光体材料	PC	Pipe Material	PC
PCB开孔建议	ø1.50mm	PCB Mounting Hole	ø1.50mm
光源建议	L×W×H<1.60×1.60×1.00mm	LED Suggestion	L×W×H<1.60×1.60×1.00mm
工作温度	-40°C~+90°C	Ambient Temperature	-40°C~+90°C

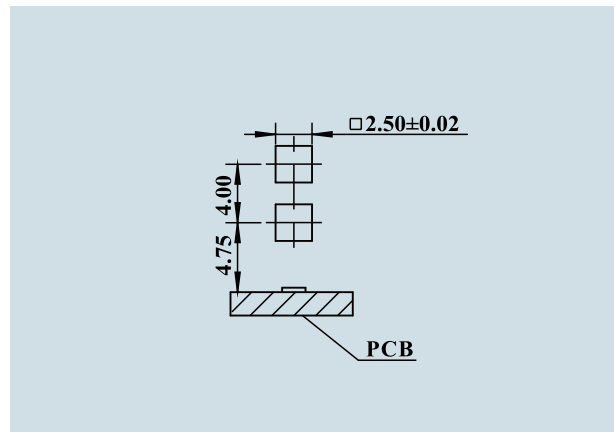
产品尺寸 OUTLINE DRAWING



Outline Drawing



PCB Layout Suggestion

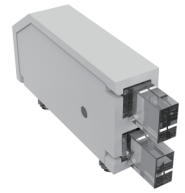


A	Recommended LEDs
6.60	T2~T4

双通道方口导光柱

2-LEVEL LIGHT PIPE

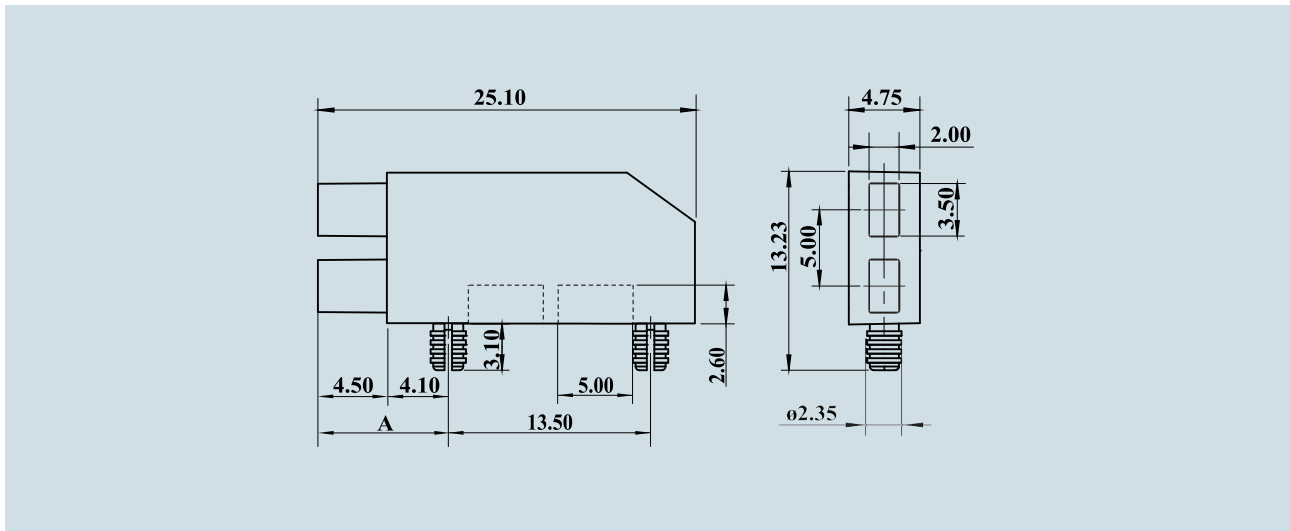
TAA21



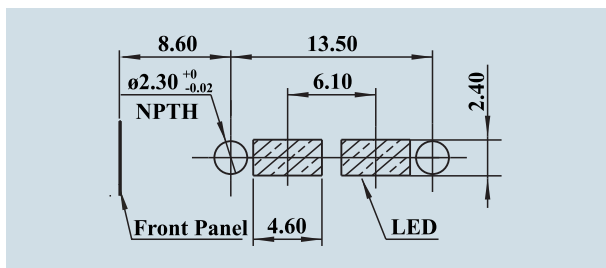
产品参数 SPECIFICATIONS

产品型号	TAA21	Model	TAA21
外壳材料	PC+ABS	Shield Material	PC+ABS
导光体材料	PC	Pipe Material	PC
PCB开孔建议	ø2.30mm	PCB Mounting Hole	ø2.30mm
光源建议	L×W×H<4.60×2.40×2.40mm	LED Suggestion	L×W×H<4.60×2.40×2.40mm
工作温度	-40°C~+90°C	Ambient Temperature	-40°C~+90°C

产品尺寸 OUTLINE DRAWING

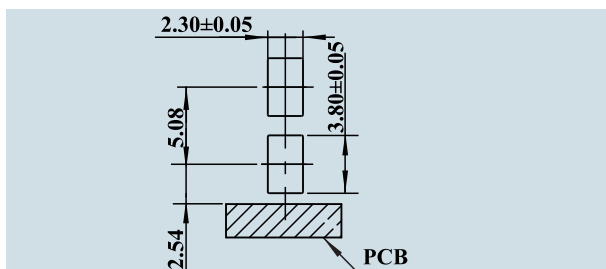


Outline Drawing



PCB Layout Suggestion

A	Recommended LEDs
8.60	T5~T7

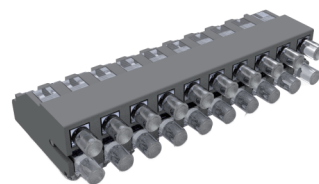


Front Panel Suggestion

双通道并排导光柱

MULTI-2-LEVEL LIGHT PIPE

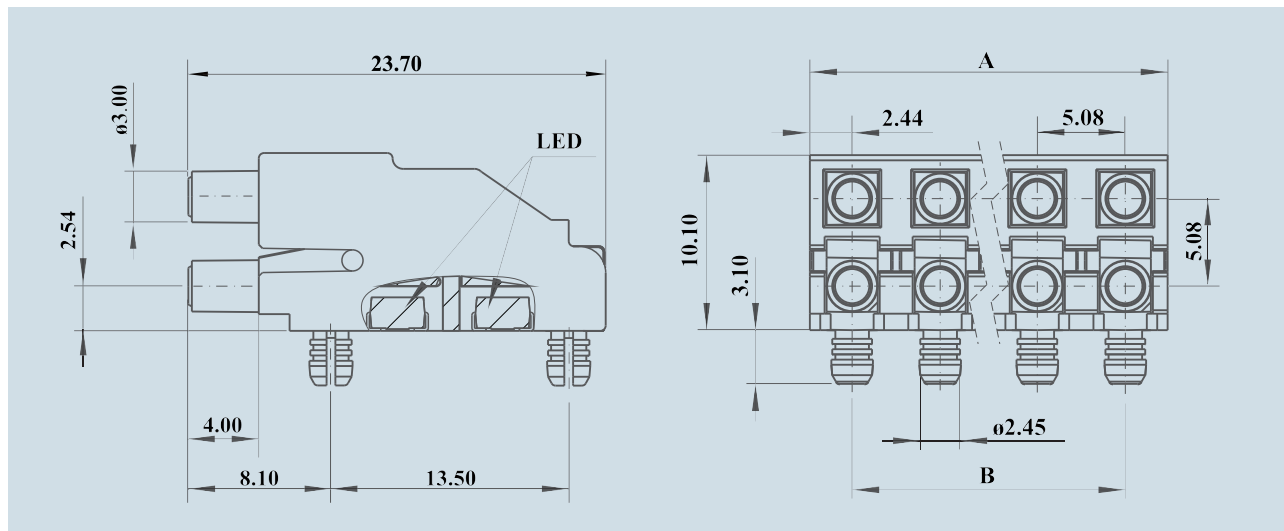
TAD12-XX-S1



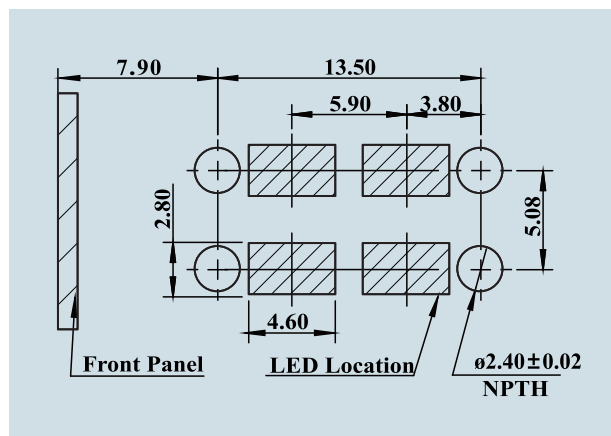
产品参数 SPECIFICATIONS

产品型号	TAD12-XX-S1	Model	TAD12-XX-S1
外壳材料	PA66	Shield Material	PA66
导光体材料	PC	Pipe Material	PC
PCB开孔建议	ø2.40mm	PCB Mounting Hole	ø2.40mm
光源建议	L×W×H<4.60×2.80×2.20mm	LED Suggestion	L×W×H<4.60×2.80×2.20mm
工作温度	-40°C~+90°C	Ambient Temperature	-40°C~+90°C

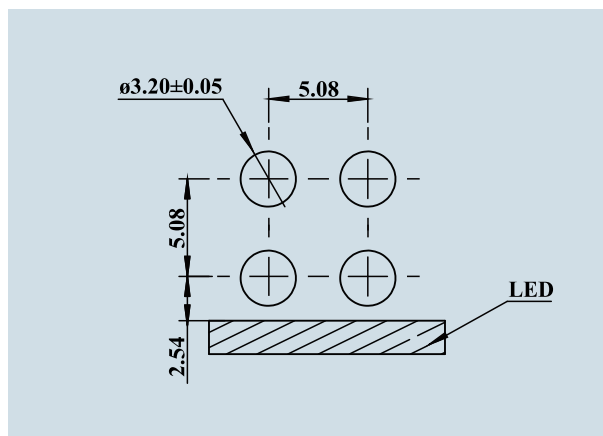
产品尺寸 OUTLINE DRAWING



Outline Drawing



PCB Layout Suggestion



Front Panel Suggestion

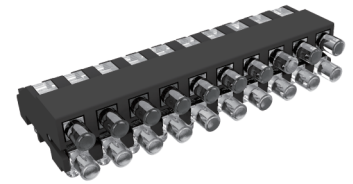
	产品型号 Model	位数 Arrays	A	B
	TAD12-02-S1	2	9.96	5.08
	TAD12-03-S1	3	15.04	10.16
	TAD12-04-S1	4	20.12	15.24
	TAD12-05-S1	5	25.20	20.32
	TAD12-06-S1	6	30.28	25.40
	TAD12-07-S1	7	35.36	30.48
	TAD12-08-S1	8	40.44	35.56
	TAD12-09-S1	9	45.52	40.64
	TAD12-10-S1	10	50.60	45.72

*适用灯珠封装 Suitable LED types: 0603、0805、1204、1206、3528

双通道并排导光柱

MULTI-2-LEVEL LIGHT PIPE

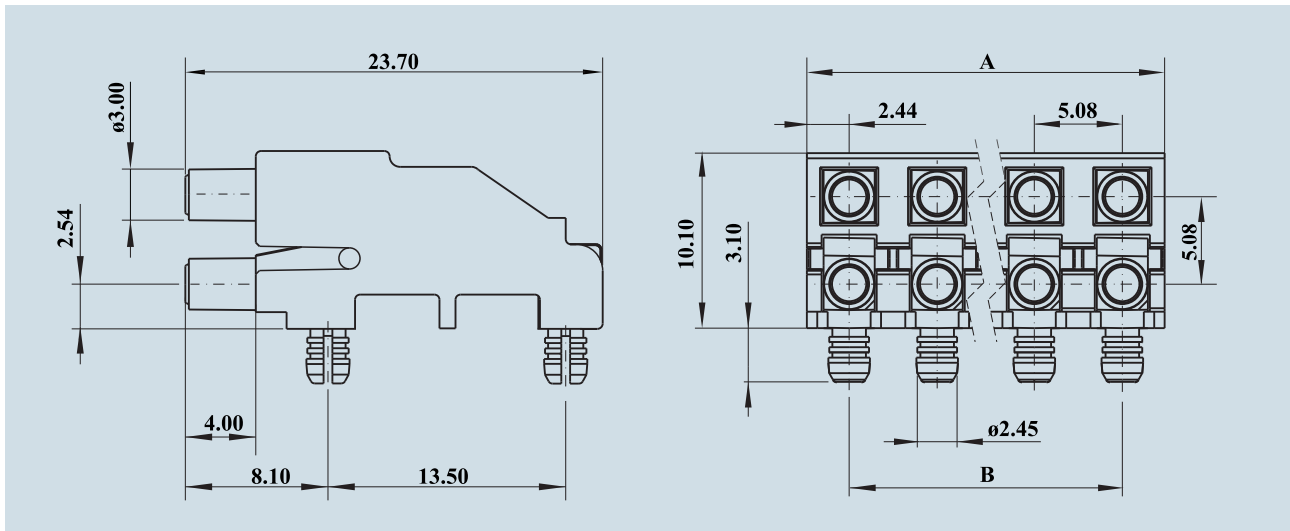
TAD14-XX-S1



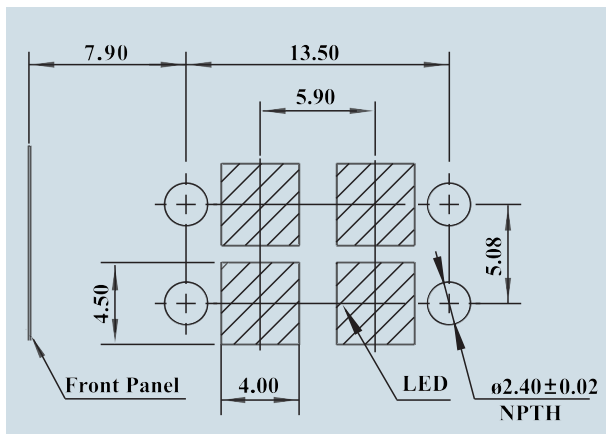
产品参数 SPECIFICATIONS

产品型号	TAD14-XX-S1	Model	TAD14-XX-S1
外壳材料	PA66	Shield Material	PA66
导光体材料	PC	Pipe Material	PC
PCB开孔建议	ø2.40mm	PCB Mounting Hole	ø2.40mm
光源建议	L×W×H<4.50×4.00×2.20mm	LED Suggestion	L×W×H<4.50×4.00×2.20mm
工作温度	-40°C~+90°C	Ambient Temperature	-40°C~+90°C

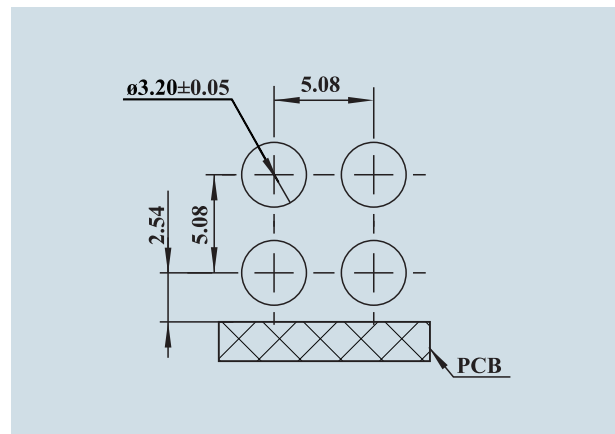
产品尺寸 OUTLINE DRAWING











Outline Drawing



PCB Layout Suggestion



Front Panel Suggestion

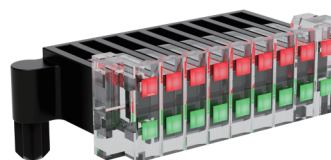
	产品型号 Model	位数 Arrays	A	B
	TAD14-02-S1	2	9.96	5.08
	TAD14-03-S1	3	15.04	10.16
	TAD14-04-S1	4	20.12	15.24
	TAD14-05-S1	5	25.20	20.32
	TAD14-06-S1	6	30.28	25.40
	TAD14-07-S1	7	35.36	30.48
	TAD14-08-S1	8	40.44	35.56
	TAD14-09-S1	9	45.52	40.64
	TAD14-10-S1	10	50.60	45.72

*适用灯珠封装 Suitable LED types: 0603、0805、1204、1206、3528

18位双排导光柱

18-WAY LIGHT PIPE

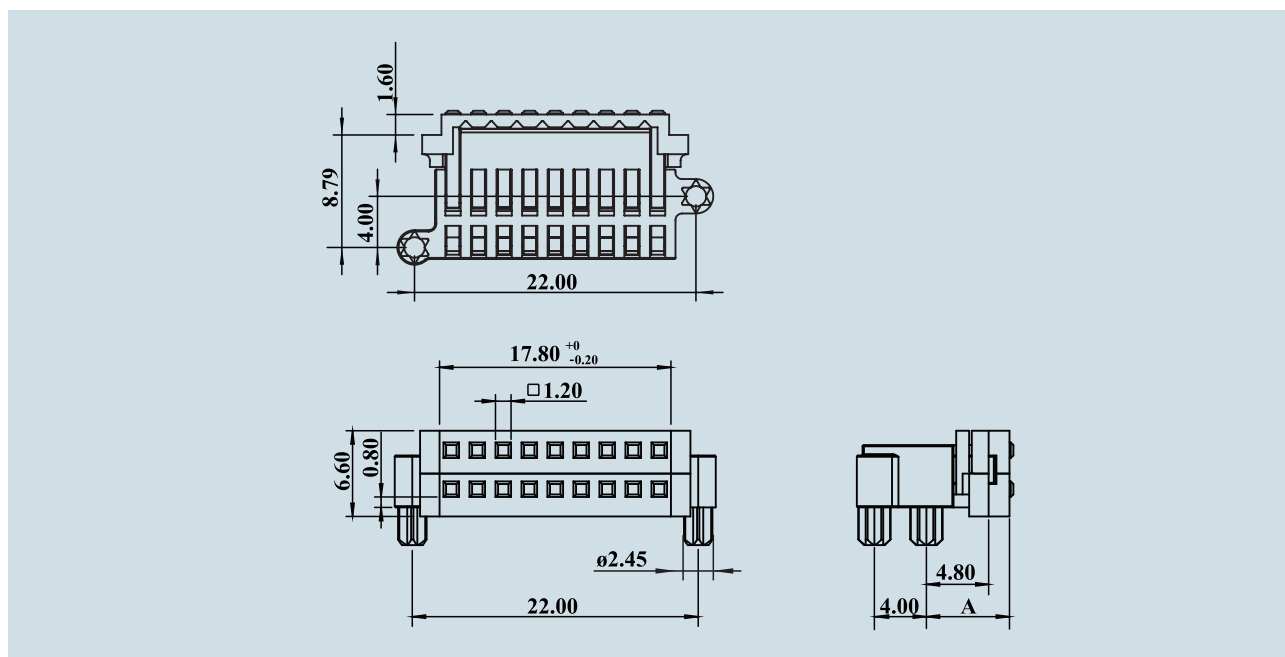
TAD15



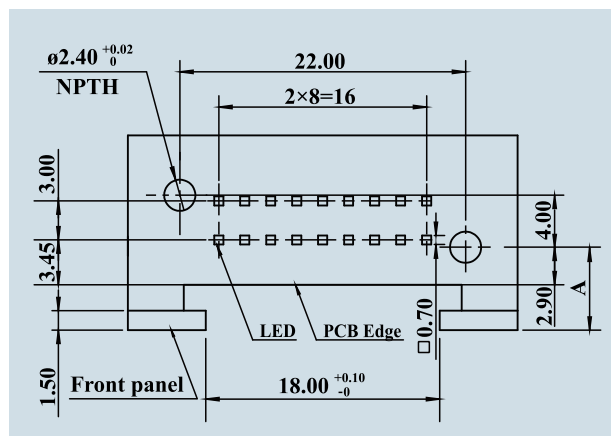
产品参数 SPECIFICATIONS

产品型号	TAD15	Model	TAD15
外壳材料	PA66	Shield Material	PA66
导光体材料	PC	Pipe Material	PC
PCB开孔建议	ø2.40mm	PCB Mounting Hole	ø2.40mm
光源建议	L×W×H<0.70×0.70×0.80mm	LED Suggestion	L×W×H<0.70×0.70×0.80mm
工作温度	-40°C~+90°C	Ambient Temperature	-40°C~+90°C

产品尺寸 OUTLINE DRAWING



Outline Drawing



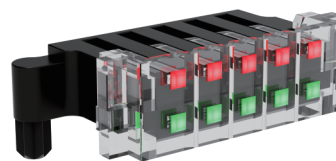
PCB Layout Suggestion

A	Recommended LEDs
6.40	T6~T10

10位双排导光柱

10-WAY LIGHT PIPE

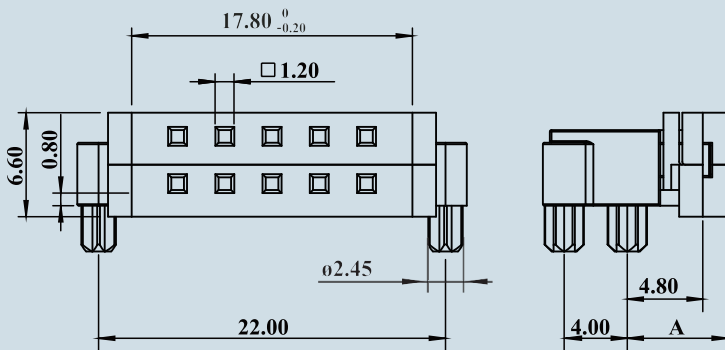
TAD16



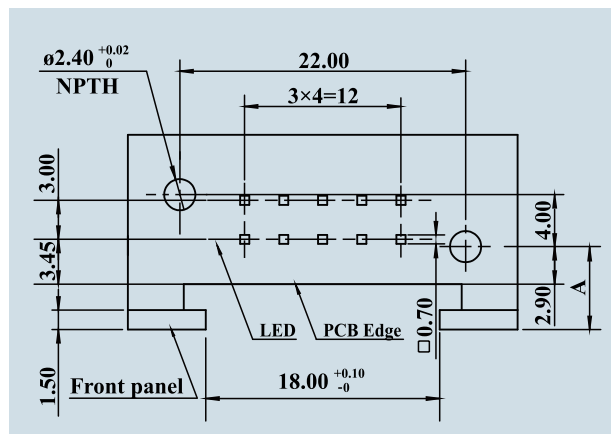
产品参数 SPECIFICATIONS

产品型号	TAD16	Model	TAD16
外壳材料	PA66	Shield Material	PA66
导光体材料	PC	Pipe Material	PC
PCB开孔建议	ø2.40mm	PCB Mounting Hole	ø2.40mm
光源建议	L×W×H<0.70×0.70×0.80mm	LED Suggestion	L×W×H<0.70×0.70×0.80mm
工作温度	-40°C~+90°C	Ambient Temperature	-40°C~+90°C

产品尺寸 OUTLINE DRAWING



Outline Drawing



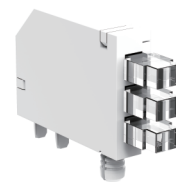
PCB Layout Suggestion

A	Recommended LEDs
6.40	T6~T10

三通道方口导光柱

3-LEVEL LIGHT PIPE

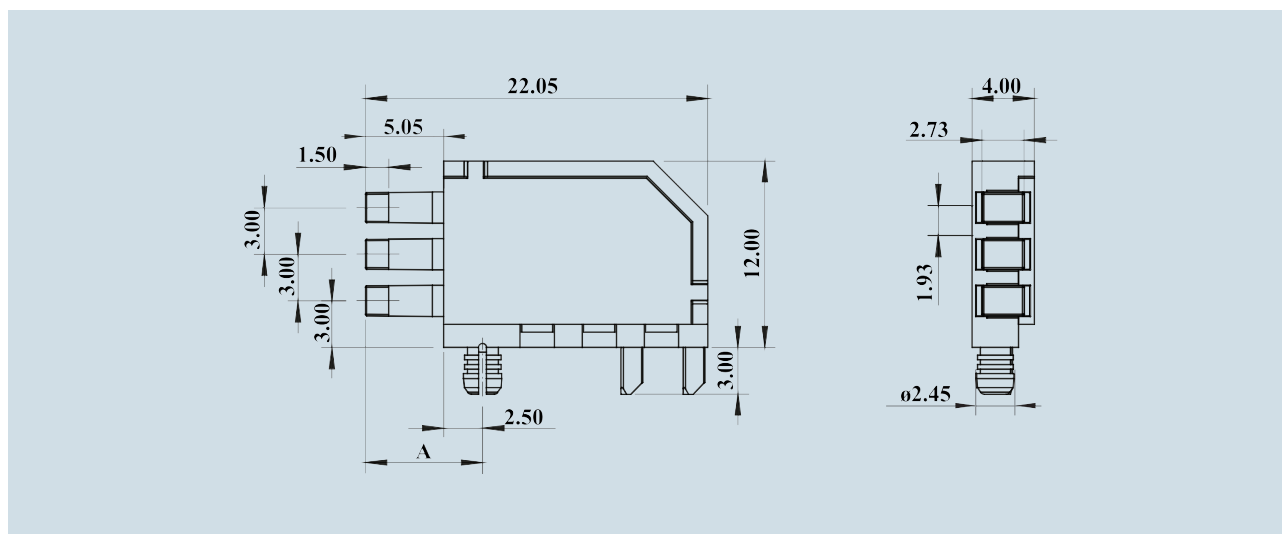
TAJ11



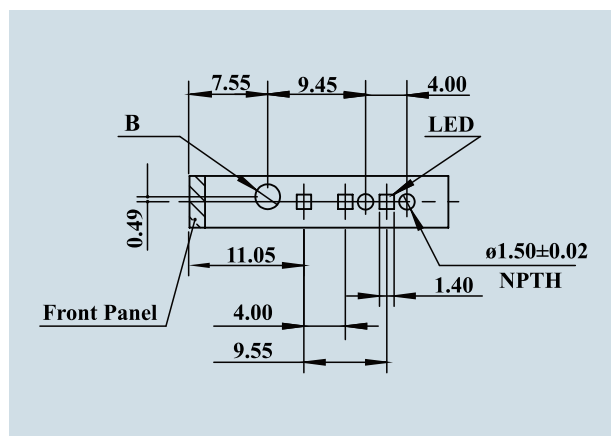
产品参数 SPECIFICATIONS

产品型号	TAJ11	Model	TAJ11
外壳材料	PC+ABS	Shield Material	PC+ABS
导光体材料	PC	Pipe Material	PC
PCB开孔建议	$\phi 1.50$ & $\phi 2.35$ - 2.40 mm	PCB Mounting Hole	$\phi 1.50$ & $\phi 2.35$ - 2.40 mm
光源建议	$L \times W \times H < 1.40 \times 1.40 \times 0.80$ mm	LED Suggestion	$L \times W \times H < 1.40 \times 1.40 \times 0.80$ mm
工作温度	-40°C~+90°C	Ambient Temperature	-40°C~+90°C

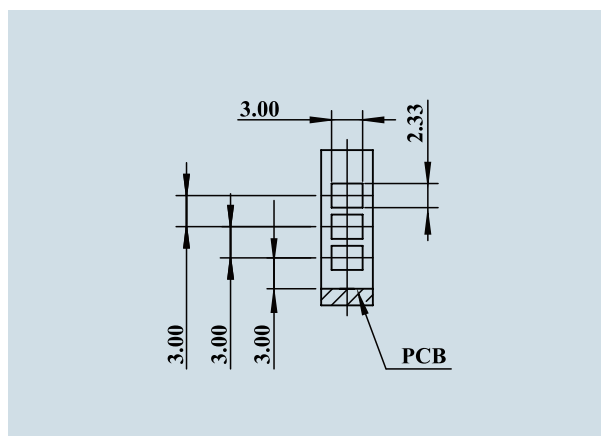
产品尺寸 OUTLINE DRAWING



Outline Drawing



PCB Layout Suggestion



Front Panel Suggestion

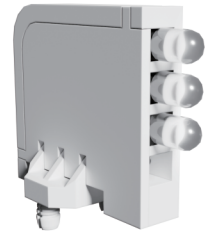
A	Recommended LEDs
7.55	T2~T4

B	1.6mm PCB	2.0mm PCB
	$\phi 2.35 \pm 0.02$	$\phi 2.40^{+0}_{-0.02}$

三通道导光柱

3-LEVEL LIGHT PIPE

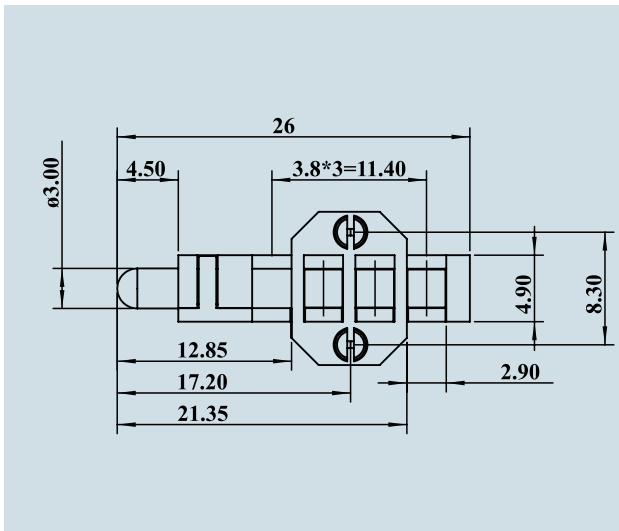
TAJ12



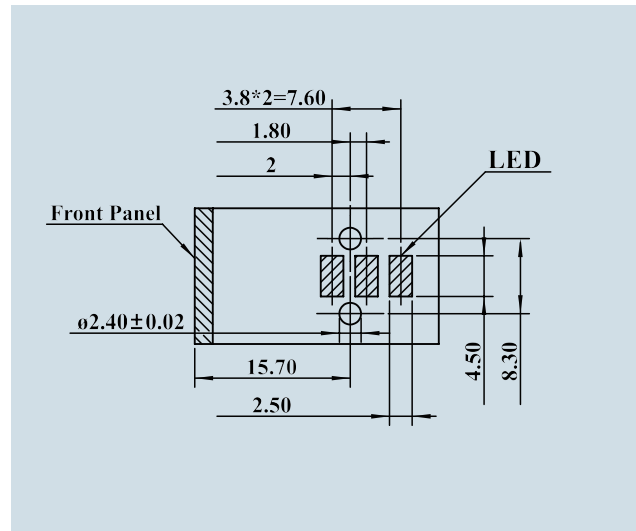
产品参数 SPECIFICATIONS

产品型号	TAJ12	Model	TAJ12
外壳材料	PC+ABS	Shield Material	PC+ABS
导光体材料	PC	Pipe Material	PC
PCB开孔建议	ø2.40mm	PCB Mounting Hole	ø2.40mm
光源建议	L×W×H < 4.50×2.50×2.10mm	LED Suggestion	L×W×H < 4.50×2.50×2.10mm
工作温度	-40°C~+90°C	Ambient Temperature	-40°C~+90°C

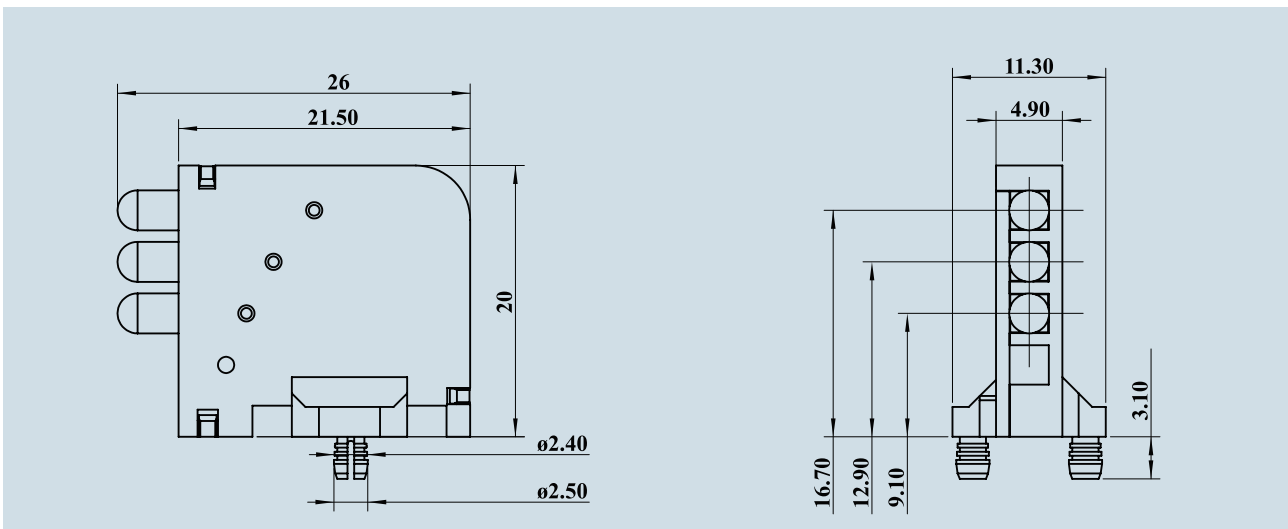
产品尺寸 OUTLINE DRAWING



Outline Drawing



PCB Layout Suggestion



四通道导光柱

4-LEVEL LIGHT PIPE

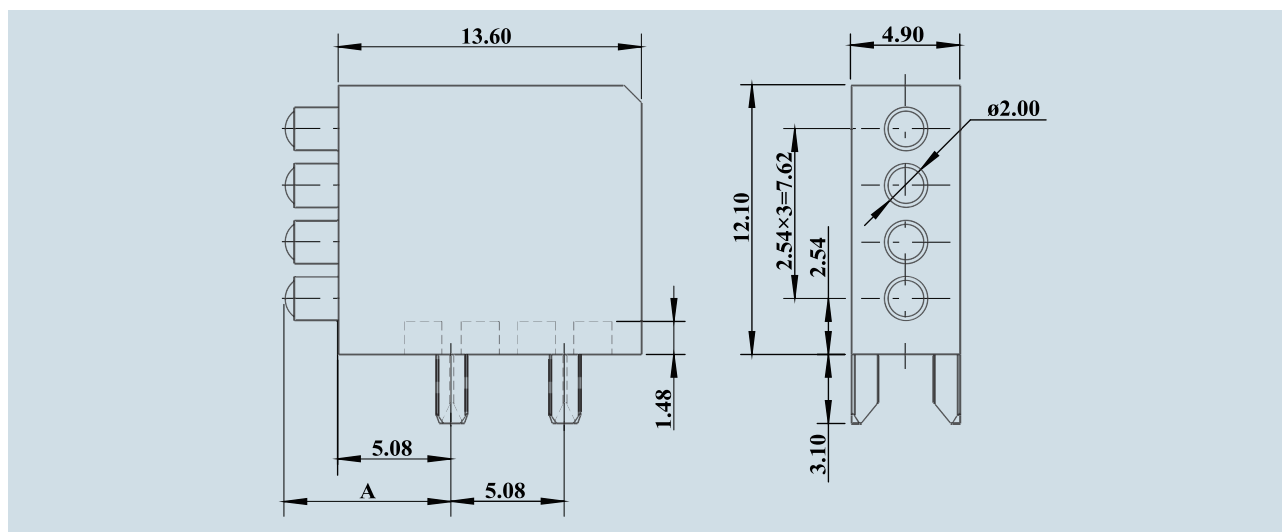
TAC11



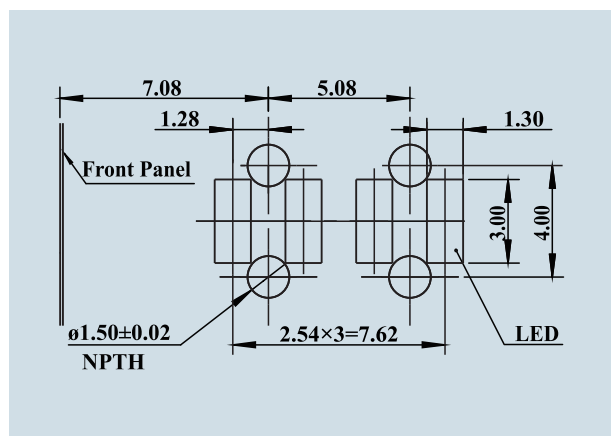
产品参数 SPECIFICATIONS

产品型号	TAC11	Model	TAC11
外壳材料	PC+ABS	Shield Material	PC+ABS
导光体材料	PC	Pipe Material	PC
PCB开孔建议	ø1.50mm	PCB Mounting Hole	ø1.50mm
光源建议	< 0805	LED Suggestion	< 0805
工作温度	-40°C~+90°C	Ambient Temperature	-40°C~+90°C

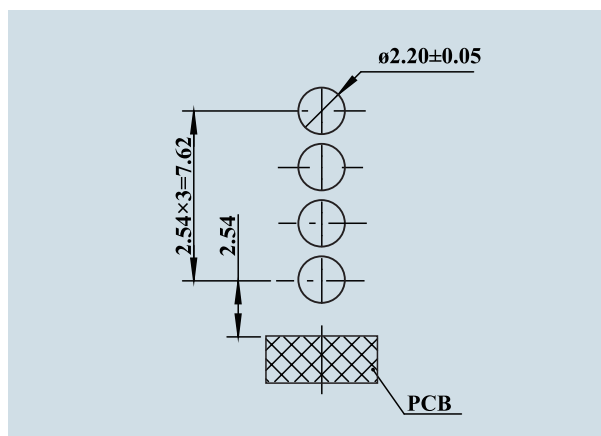
产品尺寸 OUTLINE DRAWING



Outline Drawing



PCB Layout Suggestion



Front Panel Suggestion

A	Recommended LEDs
7.48	T2~T4

四通道导光柱

4-LEVEL LIGHT PIPE

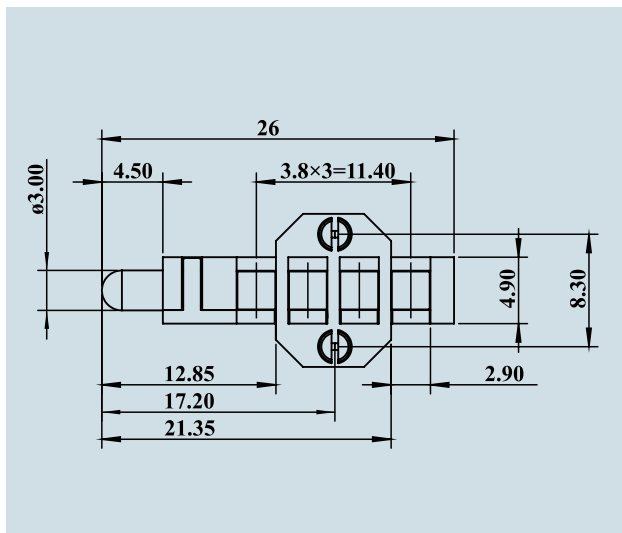
TAC12



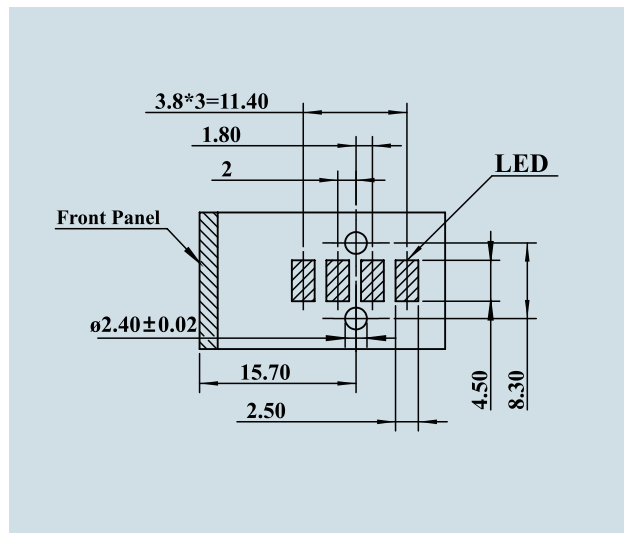
产品参数 SPECIFICATIONS

产品型号	TAC12	Model	TAC12
外壳材料	PC+ABS	Shield Material	PC+ABS
导光体材料	PC	Pipe Material	PC
PCB开孔建议	ø2.40mm	PCB Mounting Hole	ø2.40mm
光源建议	L×W×H < 4.50×2.50×2.10mm	LED Suggestion	L×W×H < 4.50×2.50×2.10mm
工作温度	-40°C~+90°C	Ambient Temperature	-40°C~+90°C

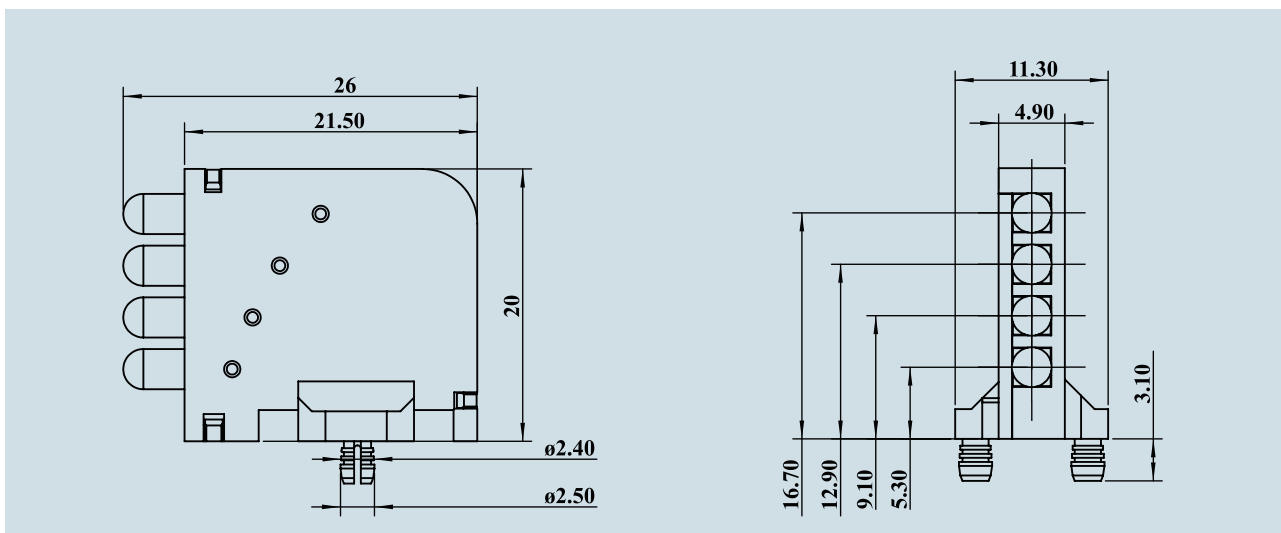
产品尺寸 OUTLINE DRAWING



Outline Drawing

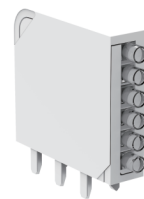


PCB Layout Suggestion



六通道导光柱

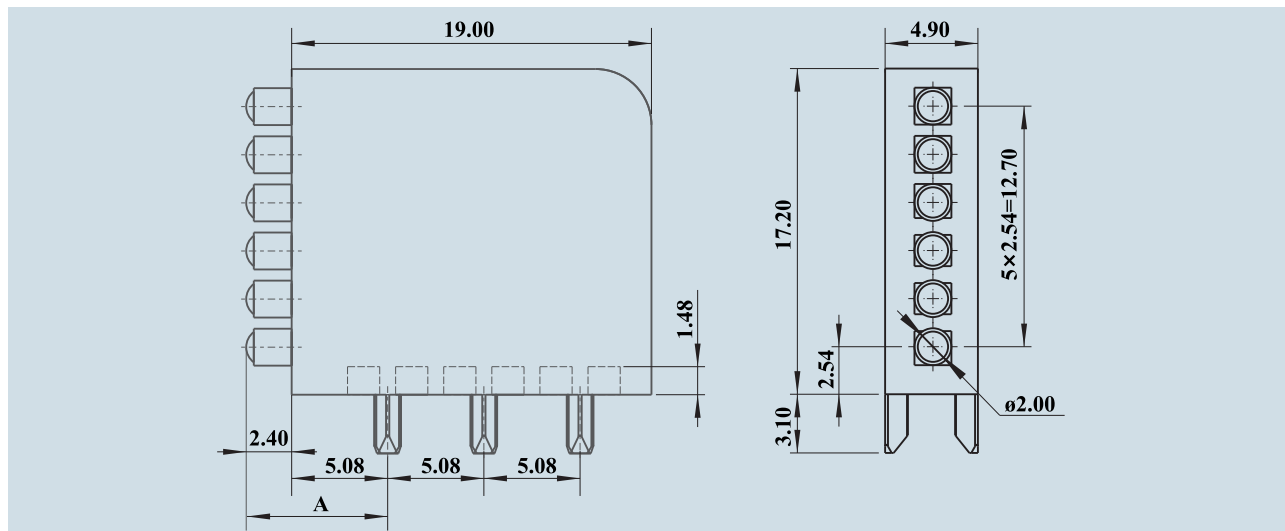
6-LEVEL LIGHT PIPE / TAG11



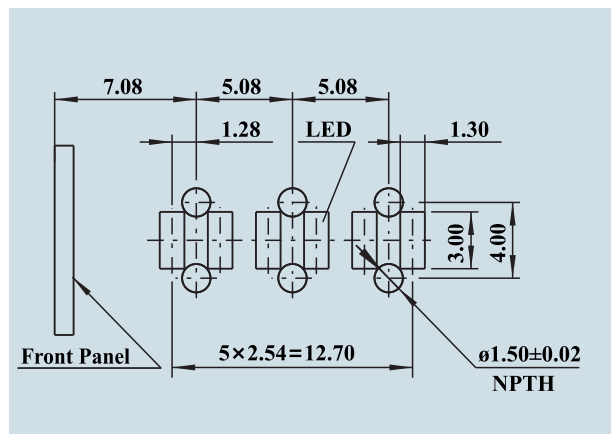
产品参数 SPECIFICATIONS

产品型号	TAG11	Model	TAG11
外壳材料	PC+ABS	Shield Material	PC+ABS
导光体材料	PC	Pipe Material	PC
PCB开孔建议	ø1.50mm	PCB Mounting Hole	ø1.50mm
光源建议	< 0805	LED Suggestion	< 0805
工作温度	-40°C~+90°C	Ambient Temperature	-40°C~+90°C

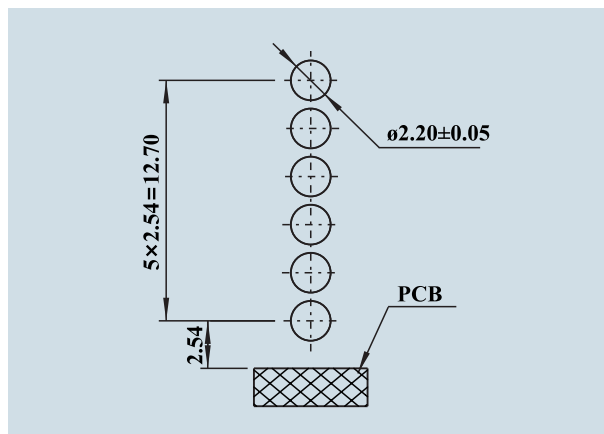
产品尺寸 OUTLINE DRAWING



Outline Drawing



PCB Layout Suggestion



Front Panel Suggestion

A	Recommended LEDs
7.48	T2~T4

4U导光壳体

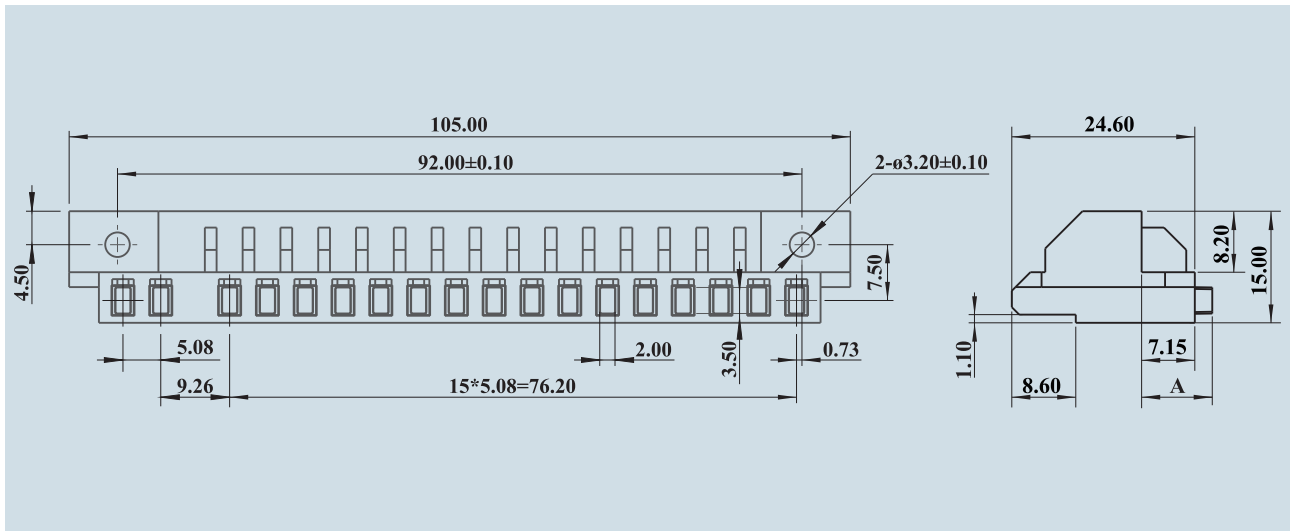
4U LIGHT PIPE SHIELD / TO4U-MB-01



产品参数 SPECIFICATIONS

产品型号	TO4U-MB-01	Model	TO4U-MB-01
外壳材料	PA66	Shield Material	PA66
导光体材料	PC	Pipe Material	PC
PCB开孔建议	/	PCB Mounting Hole	/
光源建议	/	LED Suggestion	/
工作温度	-40°C~+90°C	Ambient Temperature	-40°C~+90°C

产品尺寸 OUTLINE DRAWING

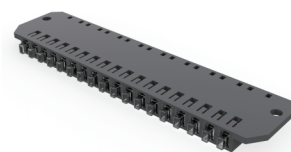


Outline Drawing

A	Recommended LEDs
9.50	T4~T7;L1~L2

5U导光壳体

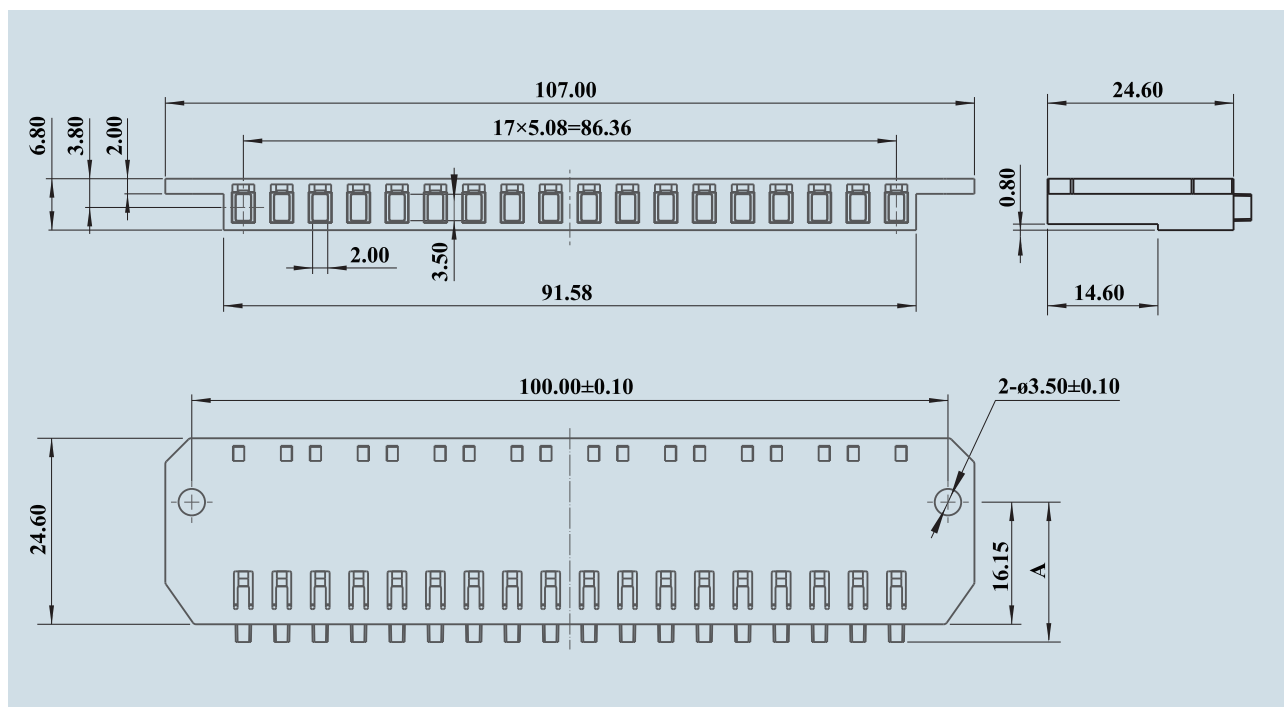
5U LIGHT PIPE SHIELD / TO5U-MB-01



产品参数 SPECIFICATIONS

产品型号	TO5U-MB-01	Model	TO5U-MB-01
外壳材料	PA66	Shield Material	PA66
导光体材料	PC	Pipe Material	PC
PCB开孔建议	/	PCB Mounting Hole	/
光源建议	/	LED Suggestion	/
工作温度	-40°C~+90°C	Ambient Temperature	-40°C~+90°C

产品尺寸 OUTLINE DRAWING



Outline Drawing

A	Recommended LEDs
18.50	T4~T7;L1~L2

6U导光壳体

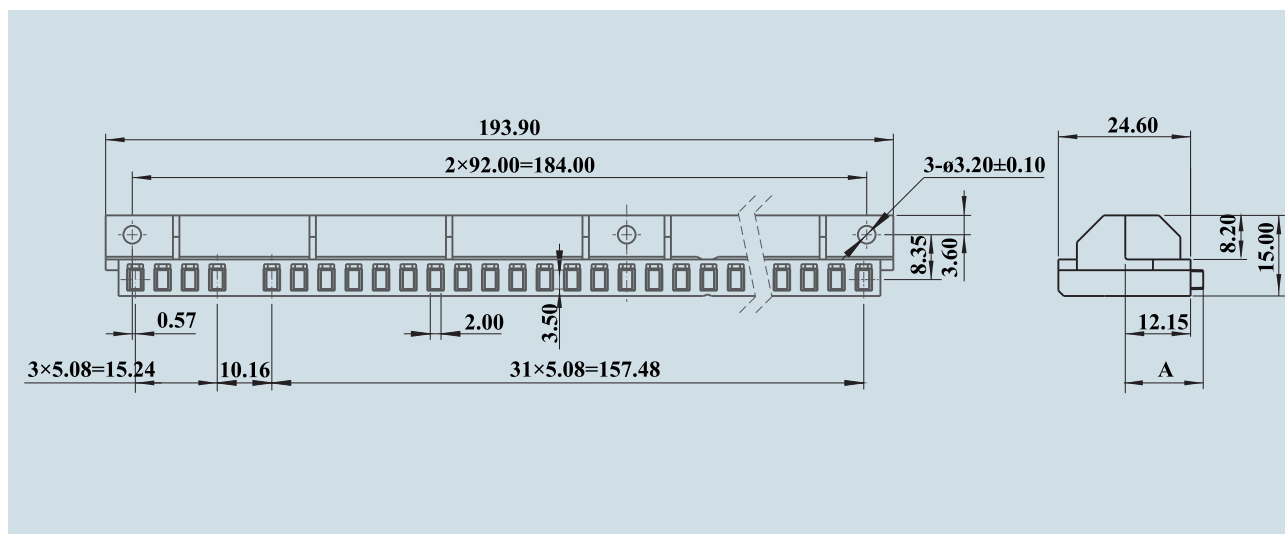
6U LIGHT PIPE SHIELD / TO6U-MB-01



产品参数 SPECIFICATIONS

产品型号	TO6U-MB-01	Model	TO6U-MB-01
外壳材料	PA66	Shield Material	PA66
导光体材料	PC	Pipe Material	PC
PCB开孔建议	/	PCB Mounting Hole	/
光源建议	/	LED Suggestion	/
工作温度	-40°C~+90°C	Ambient Temperature	-40°C~+90°C

产品尺寸 OUTLINE DRAWING



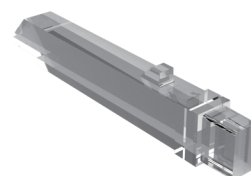
Outline Drawing

A	Recommended LEDs
14.50	T4~T7;L1~L2

面板导光柱

LIGHT PIPE FOR FRONT PANELS

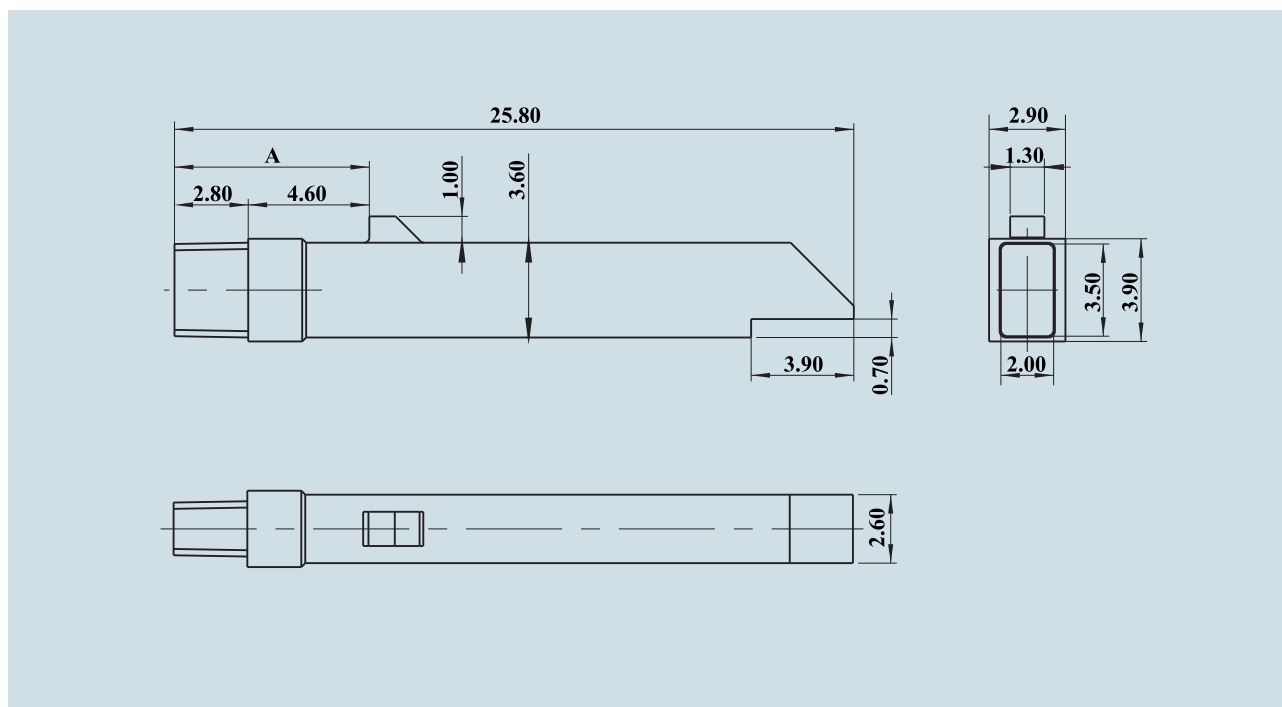
TOXU-MB-02



产品参数 SPECIFICATIONS

产品型号	TOXU-MB-02	Model	TOXU-MB-02
外壳材料	/	Shield Material	/
导光体材料	PC	Pipe Material	PC
PCB开孔建议	/	PCB Mounting Hole	/
光源建议	/	LED Suggestion	/
工作温度	-40°C~+90°C	Ambient Temperature	-40°C~+90°C

产品尺寸 OUTLINE DRAWING

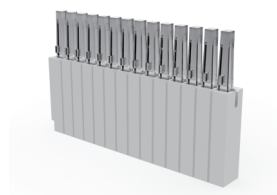


Outline Drawing

A	Recommended LEDs
7.40	T4~T7;L1~L2

竖直导光条

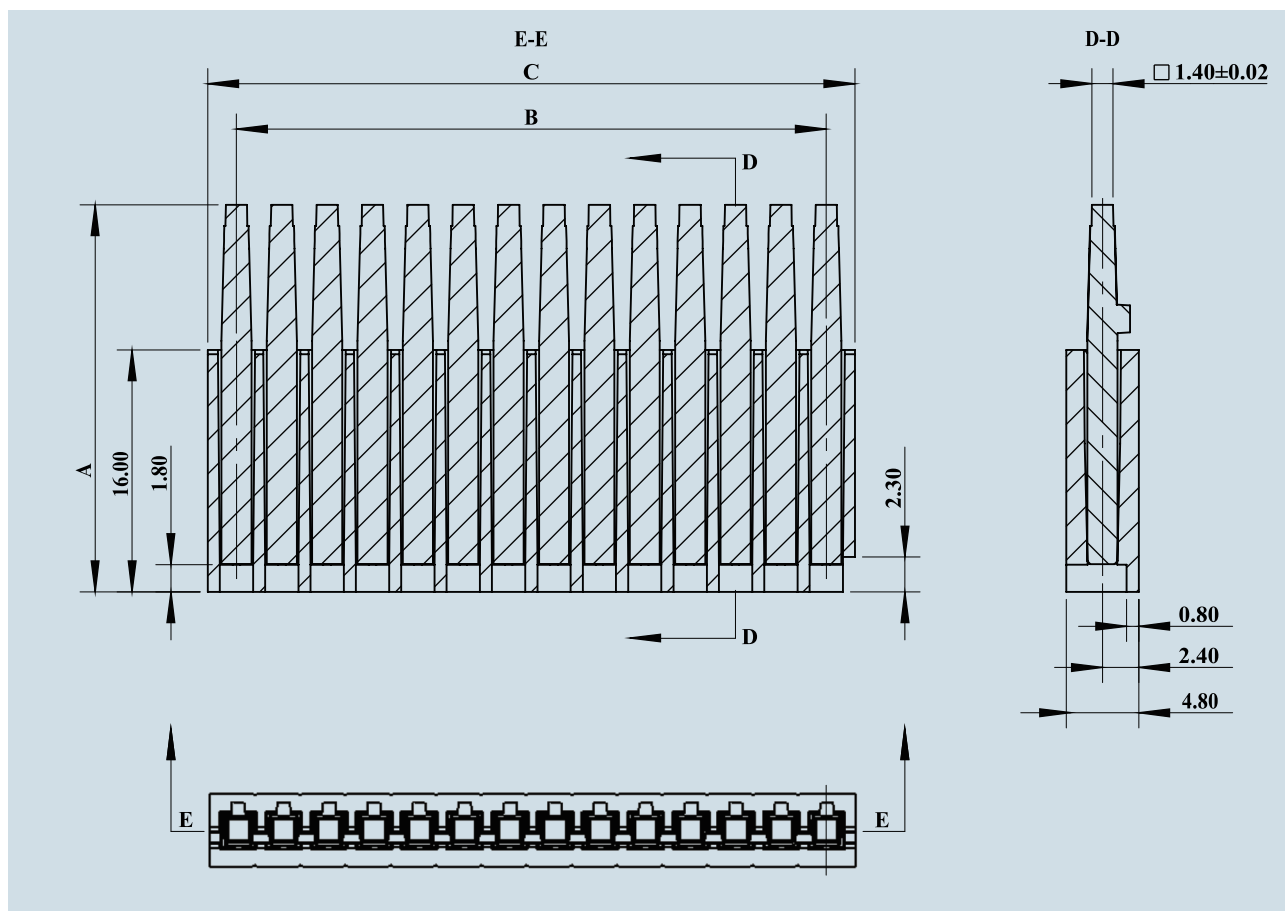
VERTICAL MULTI-LIGHT PIPE / TAF-V-L-XX



产品参数 SPECIFICATIONS

产品型号	TAF-V-L-XX	Model	TAF-V-L-XX
外壳材料	PA66	Shield Material	PA66
导光体材料	PC	Pipe Material	PC
PCB开孔建议	/	PCB Mounting Hole	/
光源建议	0603、0805	LED Suggestion	0603、0805
工作温度	-40°C~+90°C	Ambient Temperature	-40°C~+90°C

产品尺寸 OUTLINE DRAWING



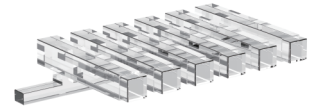
Outline Drawing

X-ways Display	A	B	C	Recommended LEDs
3	25.60	6.00	9.80	T3~T5
8	25.60	21.00	24.80	T3~T5
14	25.60	39.00	42.80	T3~T5

6位竖直导光柱

VERTICAL 6-ARRAY LIGHT PIPE

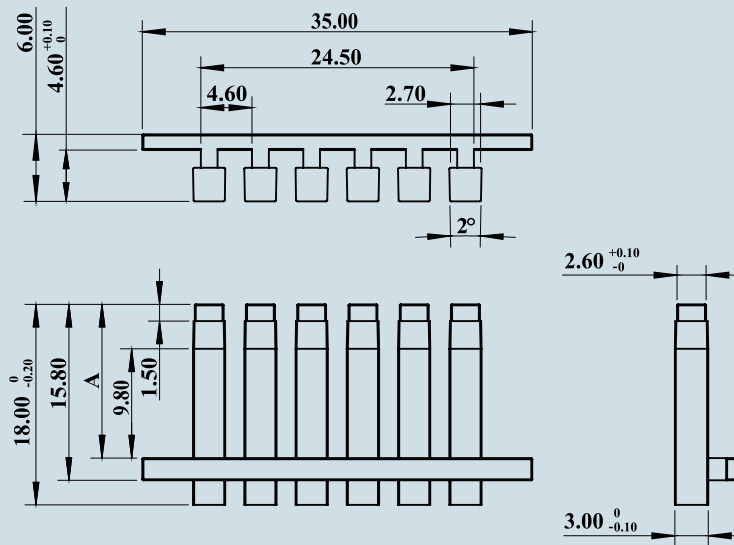
TAF11



产品参数 SPECIFICATIONS

产品型号	TAF11	Model	TAF11
外壳材料	/	Shield Material	/
导光体材料	PC	Pipe Material	PC
PCB开孔建议	/	PCB Mounting Hole	/
光源建议	/	LED Suggestion	/
工作温度	-40°C~+90°C	Ambient Temperature	-40°C~+90°C

产品尺寸 OUTLINE DRAWING



Outline Drawing

A	Recommended LEDs
13.80	T4~T7;L1~L2

单通道导光柱

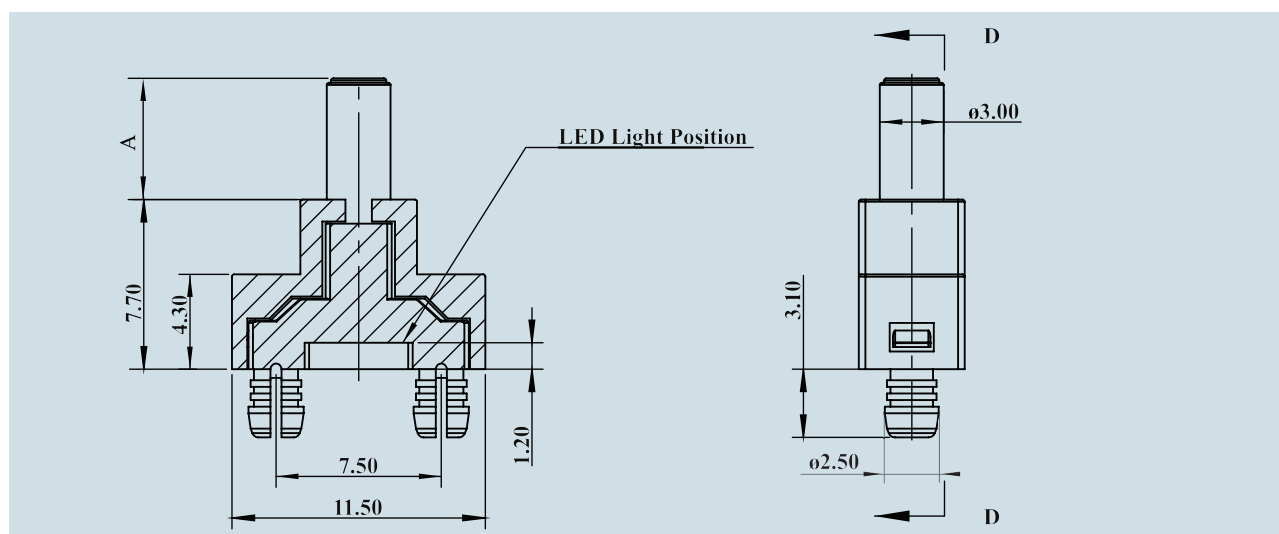
1-LEVEL LIGHT PIPE / TAF12



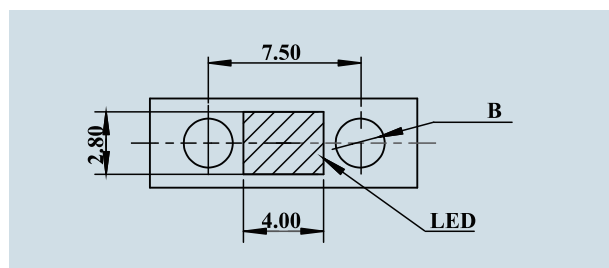
产品参数 SPECIFICATIONS

产品型号	TAF12	Model	TAF12
外壳材料	PA66	Shield Material	PA66
导光体材料	PC	Pipe Material	PC
PCB开孔建议	ø2.40-ø2.45mm	PCB Mounting Hole	ø2.40-ø2.45mm
光源建议	L×W×H < 4.00×2.80×1.00mm	LED Suggestion	L×W×H < 4.00×2.80×1.00mm
工作温度	-40°C~+90°C	Ambient Temperature	-40°C~+90°C

产品尺寸 OUTLINE DRAWING



Outline Drawing



PCB Layout Suggestion

A	Recommended LEDs	
5.50	T5~T6	
B	1.6mm PCB	2.0mm PCB
	ø2.40±0.02	ø2.45 ⁺⁰ _{-0.02}

单通道导光柱

1-LEVEL LIGHT PIPE

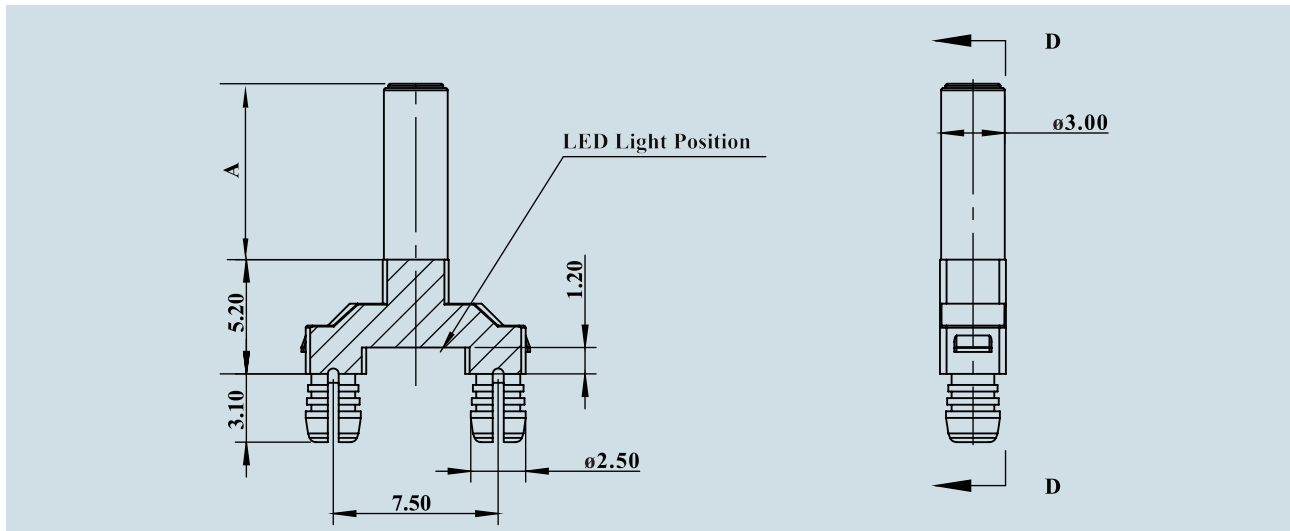
TAF12-001ZS



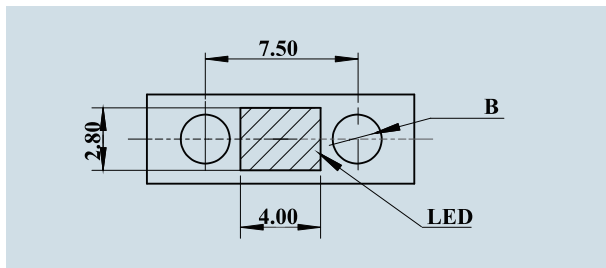
产品参数 SPECIFICATIONS

产品型号	TAF12-001ZS	Model	TAF12-001ZS
外壳材料	/	Shield Material	/
导光体材料	PC	Pipe Material	PC
PCB开孔建议	ø2.40-ø2.45mm	PCB Mounting Hole	ø2.40-ø2.45mm
光源建议	L×W×H < 4.00×2.80×1.00mm	LED Suggestion	L×W×H < 4.00×2.80×1.00mm
工作温度	-40°C~+90°C	Ambient Temperature	-40°C~+90°C

产品尺寸 OUTLINE DRAWING



Outline Drawing



PCB Layout Suggestion

A	Recommended LEDs	
8.00	T5~T6	
B	1.6mm PCB	2.0mm PCB
	ø2.40±0.02	ø2.45 ⁺⁰ _{-0.02}

5位双通道导光柱

5-ARRAY LIGHT PIPE

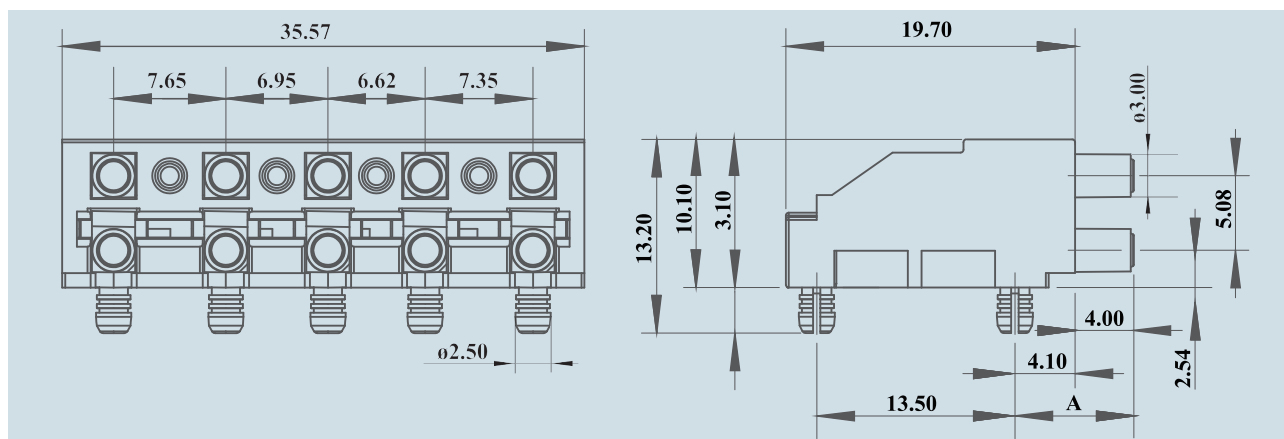
TAD13-05-S1



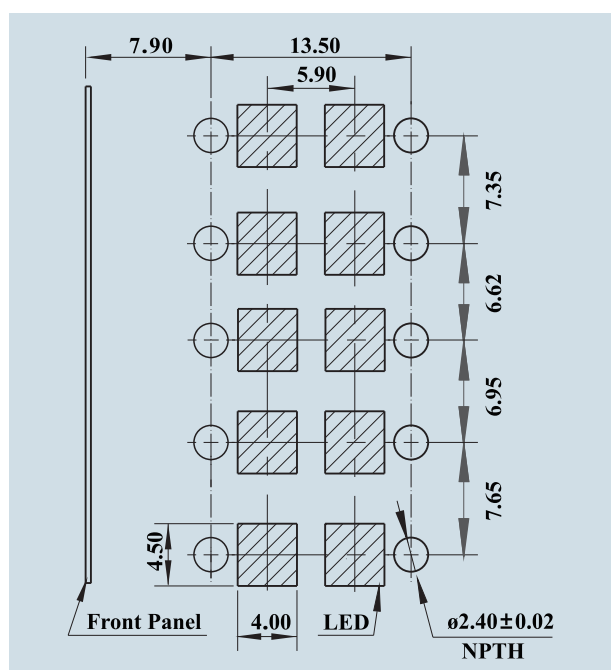
产品参数 SPECIFICATIONS

产品型号	TAD13-05-S1	Model	TAD13-05-S1
外壳材料	PA66	Shield Material	PA66
导光体材料	PC	Pipe Material	PC
PCB开孔建议	ø2.40mm	PCB Mounting Hole	ø2.40mm
光源建议	L×W<4.50×4.00mm	LED Suggestion	L×W<4.50×4.00mm
工作温度	-40°C~+90°C	Ambient Temperature	-40°C~+90°C

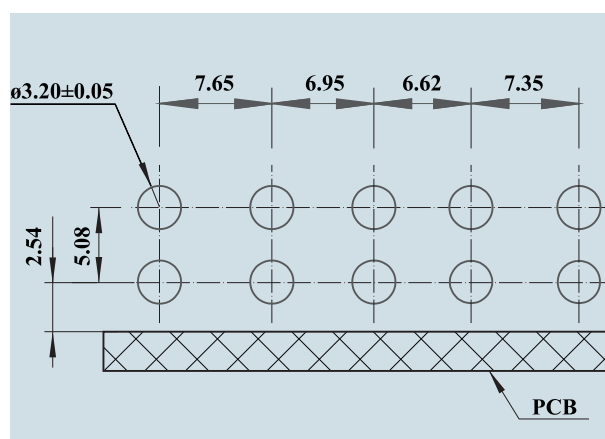
产品尺寸 OUTLINE DRAWING



Outline Drawing



PCB Layout Suggestion



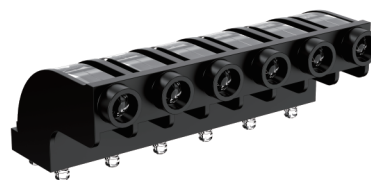
Front Panel Suggestion

A	Recommended LEDs
8.10	T6~T10

6位单通道导光柱

6-ARRAY LIGHT PIPE

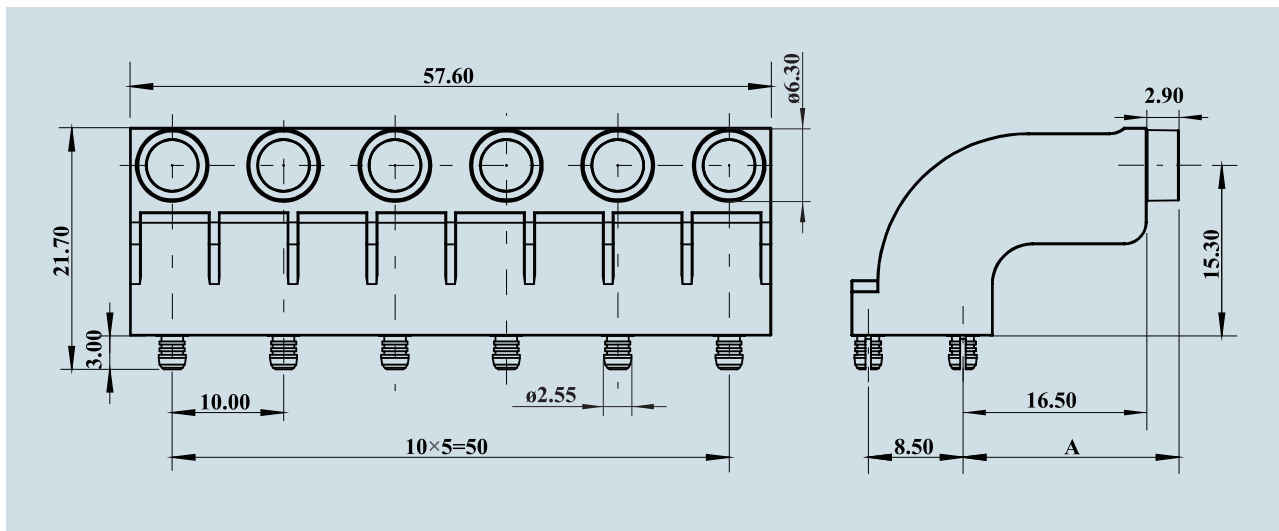
TAD17



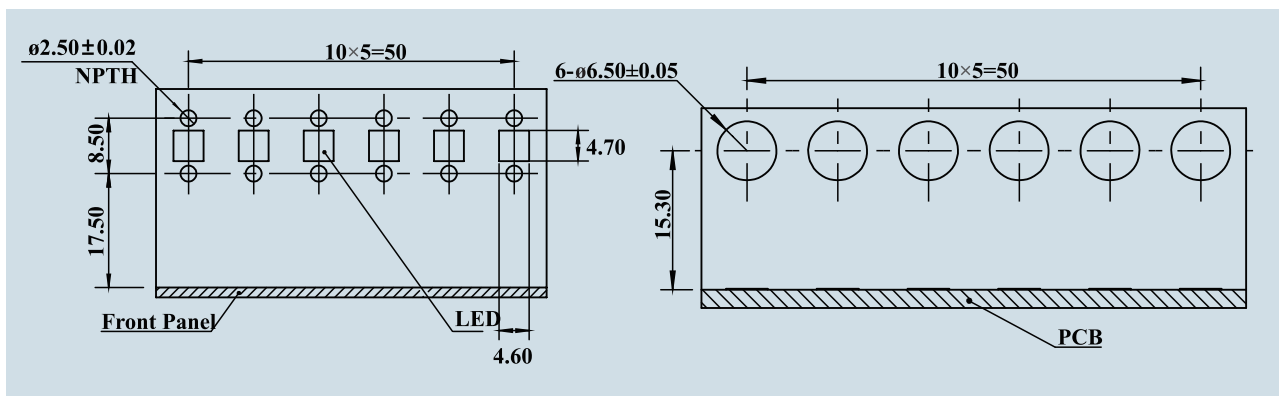
产品参数 SPECIFICATIONS

产品型号	TAD17	Model	TAD17
外壳材料	PA66	Shield Material	PA66
导光体材料	PC	Pipe Material	PC
PCB开孔建议	ø2.50mm	PCB Mounting Hole	ø2.50mm
光源建议	L×W×H<4.70×4.60×2.80mm	LED Suggestion	L×W×H<4.70×4.60×2.80mm
工作温度	-40°C~+90°C	Ambient Temperature	-40°C~+90°C

产品尺寸 OUTLINE DRAWING



Outline Drawing



PCB Layout Suggestion

Front Panel Suggestion

A	Recommended LEDs
19.40	T5~T8

6位单通道导光柱

6-ARRAY LIGHT PIPE

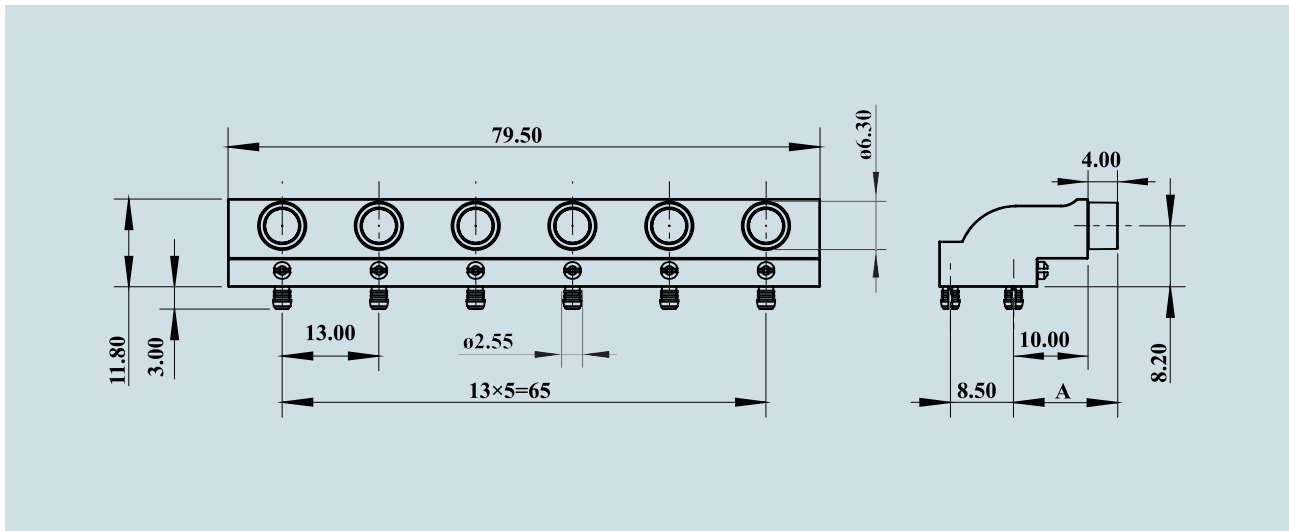
TAD18



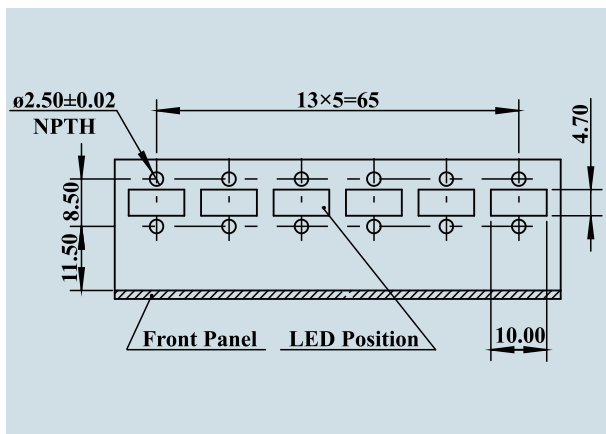
产品参数 SPECIFICATIONS

产品型号	TAD18	Model	TAD18
外壳材料	PA66	Shield Material	PA66
导光体材料	PC	Pipe Material	PC
PCB开孔建议	ø2.50mm	PCB Mounting Hole	ø2.50mm
光源建议	L×W×H<10.0×4.70×2.80mm	LED Suggestion	L×W×H<10.0×4.70×2.80mm
工作温度	-40°C~+90°C	Ambient Temperature	-40°C~+90°C

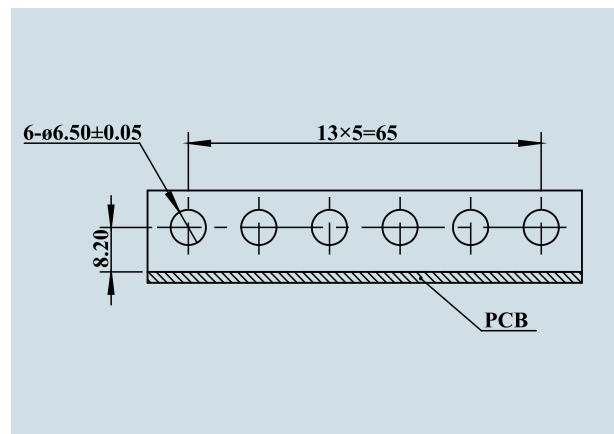
产品尺寸 OUTLINE DRAWING



Outline Drawing



PCB Layout Suggestion



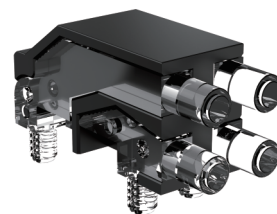
Front Panel Suggestion

A	Recommended LEDs
14.00	T6~T10

双通道并排导光柱

2-LEVEL LIGHT PIPE

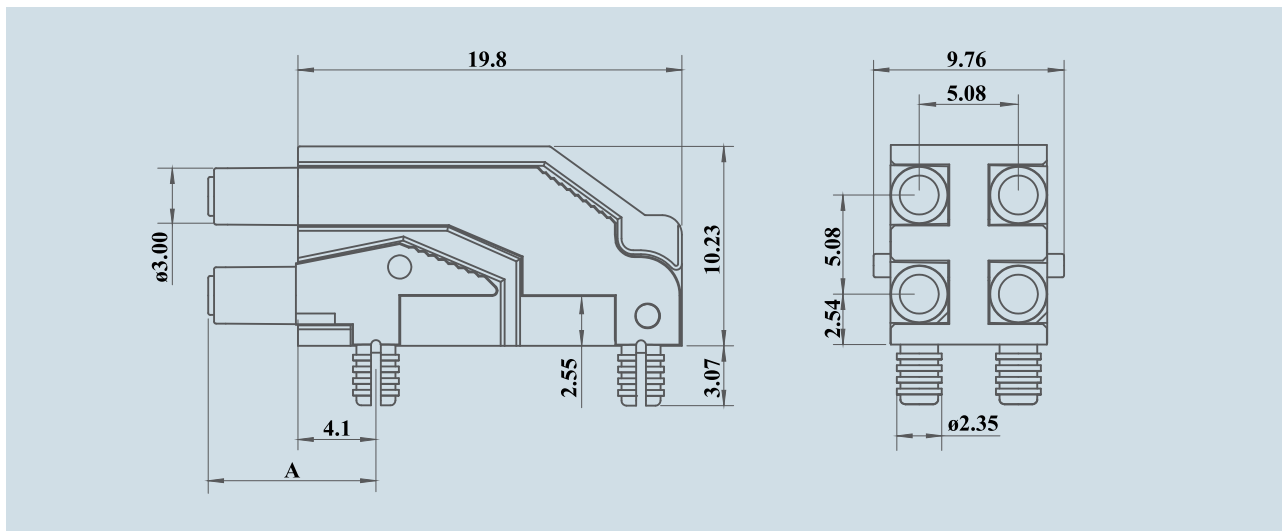
TAD19



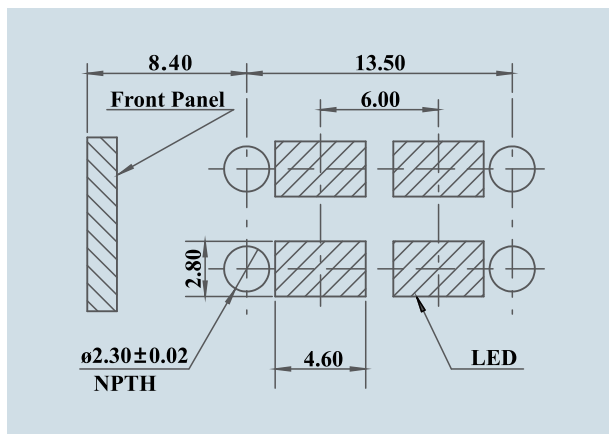
产品参数 SPECIFICATIONS

产品型号	TAD19	Model	TAD19
外壳材料	PA66	Shield Material	PA66
导光体材料	PC	Pipe Material	PC
PCB开孔建议	ø2.30mm	PCB Mounting Hole	ø2.30mm
光源建议	L×W×H<4.60×2.80×2.20mm	LED Suggestion	L×W×H<4.60×2.80×2.20mm
工作温度	-40°C~+90°C	Ambient Temperature	-40°C~+90°C

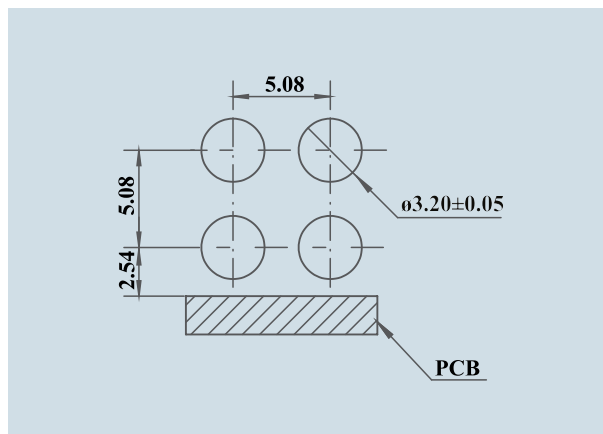
产品尺寸 OUTLINE DRAWING



Outline Drawing



PCB Layout Suggestion



Front Panel Suggestion

A	Recommended LEDs
8.6	T6~T10



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T.P.T

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