



乐清市裕林电子有限公司

YueqingYulinElectricalCo.,Ltd

Address: F/6 No.19 Keaisi road xiangyang industrial zone road tantou liushi yueqing wenzhou

Tel: 0577-27878383

website: www.pilotlamp.cn

Fax: 0577-27878383-8027

SPECIFICATIONFORAPPROVAL

规格说明书

CUSTOMER'SCODE

本厂代码:

DESCRIPTION

品 名: FLM19-10FEWM平头环形带线自锁金属按钮

SPECIFICATION

规 格: 19mm

DATE

编制日期:

PARTNO.

本厂型号:

REFERENCENO.

档案编号:

Approved By Customer 编 制	QualifiedBy 审 核	Form Designer 批 准



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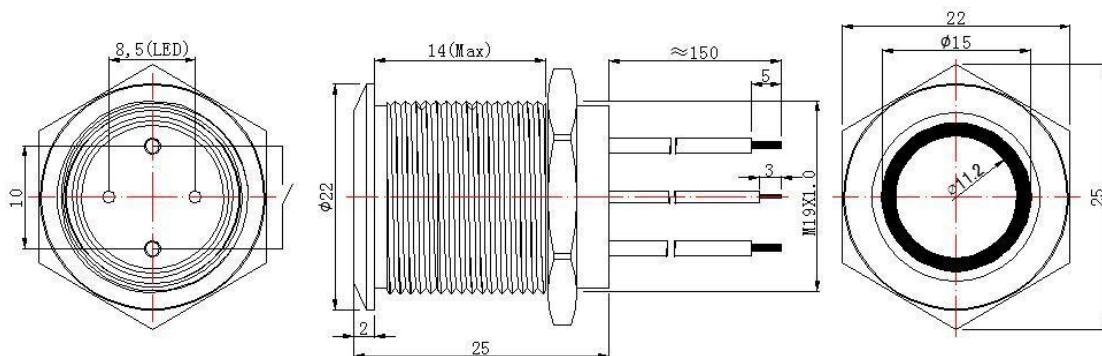
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1. 图片 Picture:

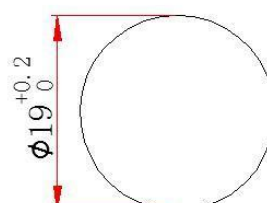
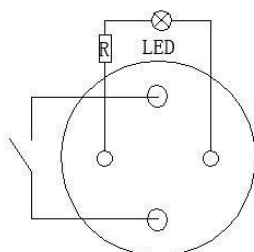


2. 图纸 drawing



电气简图

安装孔图





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3 配件材料 component material

配 件 名 Component name	材料material
导光按键	PC塑料 PC plastic
按键	304不锈钢 304Stainlesssteel
外壳套筒	H59黄铜/304不锈钢 H59 nickel plated brass/304Stainlesssteel
按钮开关脚	0.75mm ² PTFE 铁氟龙导线
防水圈 rubber ring	SIL硅胶 SIL silica gel
螺帽 nut	H59黄铜 H59 nickel plated brass
底座 housing	PA66+GF20%阻燃尼龙 PA66+GF20% nylon
光源 Light source	LED LED灯
电阻 Resistor	金属膜电阻 Metal film
触点	银触点AgCd012
按钮灯脚	0.3mm ² PTFE 铁氟龙导线

4 性能参数 performance parameter

项目items	参数parameter
开关额定电压 Rated voltage	36V DC 250V AC
开关额定电流 rated current	5A DC 5A AC
指示灯额定电压	3V-220V
指示灯额定电流	≤20mA
额定功率 rated power	180W (DC) 1250W (AC)
绝缘耐压 Insulation and voltage resistance	1800V
接触电阻: Point resistanc:	≤50mΩ
绝缘电阻: Isolation resistance:	≥100MΩ
机械寿命	50万次
电气寿命 electrical life	10万次
工作环境温度 Operating temperature	-25℃~+85℃
防护等级(头部) IP degree	IP67 IK09
指示灯颜色	红蓝绿黄白色



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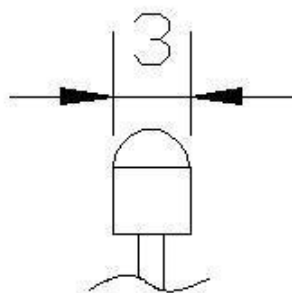
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4.DetailedPicture:

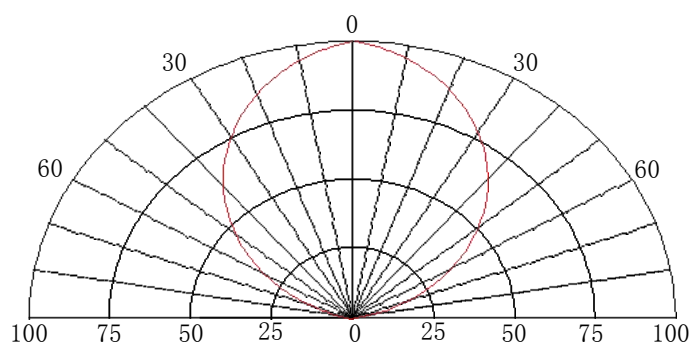


5.LEDSpecification:

■ Emitter 外型图



Spotial Distrbtion





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■ AbsoluteMaximumRating 极限工作参数

参数 Parameter	符号 Symbol	单位 Unit	极限参数 MaximumRating
耗散功率 PowerDissipation	P	MW	60
连续正向电流 ContinuousForwardCurrent	I _F	MA	25
反向电压 ReverseVoltage	V _R	V	5
工作温度范围 OperatingTemperatureRange	Top	°C	-25to+80
存放温度范围 StorageTemperatureRange	Tst	°C	-25to+90
最高焊接温度 SolderingTemperature	Tso	°C	260(for5second)

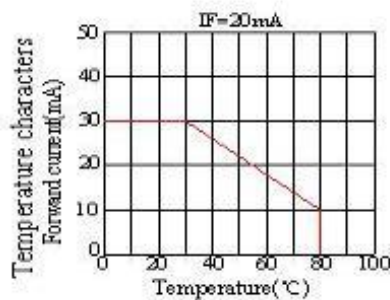
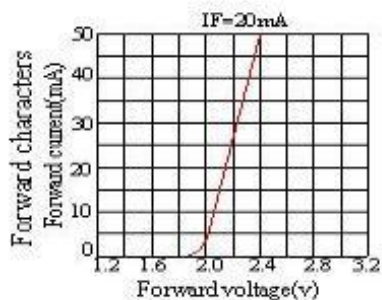
*IfpConditions:PulseWide≤10msec≤1/10

瞬间脉冲电流

*TsolConditions:3mmfromthebaseofepoxybulb

最高焊接温度 距胶体3mm

Typical electrical-optical Characteristics curves

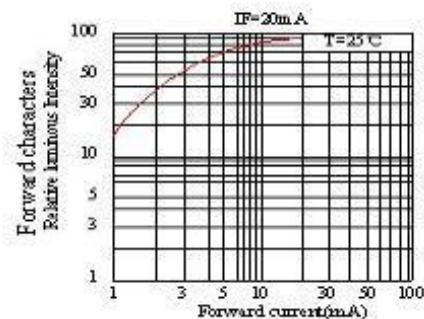
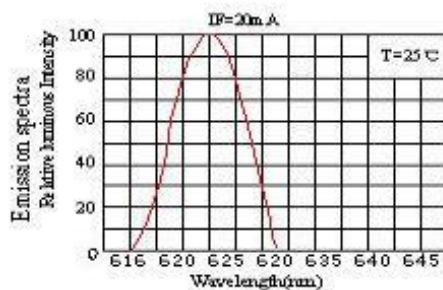
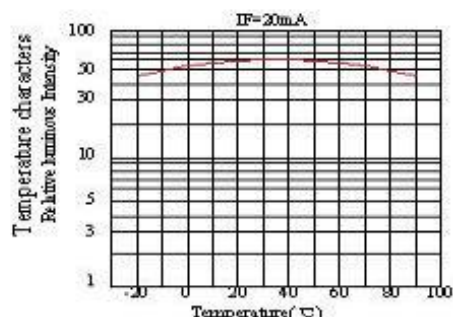


Notes:

The data are an typical presentation of the product,Contact customer service for details of technical information and warranty.

The product is sensitive to static antistatic operation environment is recommended

Products are shipped in either bulk bag package or taping.





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TypicalOptical/ElectricalCharacteristics 光电特性参数

Colorparameters 色参数		OpticalBrightness 光亮度	0.00cd/m2
MainWavelength 主波长	520.7.0nm	lightintensity 光强度	1000mcd
PeakWavelength 峰值波长	632.2nm	luminousflux 光通量	4.8lm
Peakwidth 峰值带宽	21.3nm	luminouspower 光功率	0.32mW
colourcoordinatesxy 色坐标xy	(.1404.7126)	luminousefficacy 发光效率	56.81lm/W
colourcoordinatesu'v' 色坐标u'v'	(.0498.5690)	forwardcurrent 正向电流	20.00mA
colourpurity 色纯度	0.758	alternatingvoltage 交流电压	4.22V
Colortemperature 色温	8400k	ACpower 交流电功率	0.084W

Notes:

- 1.Work absolute ratings Ta=25℃ humidity=60% 工作常规值 温度=25℃ 湿度=60%
- 2.Tolerance of measurement of forward voltage±0.1V 正向电压误差范围±0.1V
- 3.Test Machine: SSP6612 series LED test system



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Type	TestItem	REF. Standard	TestCondition	Note	Numberof Damaged
	Temperature Cycle	JISC7021 (1697)A-4	-20℃→25℃→80℃→25℃ 30mins,5mins,30mins,5mins	100cycles	0/100
	HighHumidity HeatCycle	JISC7021 (1697)A-5	30℃→65℃ 90%RH24hrs/1cycle	10cycles	0/100
	HighTemperature Storage	JISC7021 (1697)B-10	Ta=80℃	1000hrs	0/100
	HumidityHeat	JISC7021 (1697)B-11	Ta=60℃	1000hrs	0/100
	LowTemperature Storage	JISC7021 (1697)B-12	Ta=-30℃	1000hrs	0/100
	LifeTest	JISC7035 (1685)	Ta=25℃ If=20mA	1000hrs	0/100
	HighHumidity HeatLifeTest	*	60℃RH=90% If=20mA	500hrs	0/100
	LowTemperature Lifetest	*	Ta=-20℃ If=20mA	1000hrs	0/100
	Resistanceto SolderingHeat	JISC7021 (1697)A-11	Tsol=260±5℃,10sec (3mm fromthebaseoftheepoxybulb)	1time	0/20
	Solderability	JISC7021 (1697)A-2	Tsol=235±5℃,5sec (Usingflux)	1time (over95%)	0/20
	LeadPull/Bend Test	JISC 7021 (1697)A-11	Load2.5N(0.25kgf) 0°→90°→0°Bending3times	Nonoticeable damage	0/20

LEDLAMPRELIABILITY

● Test ItemsAndResults

*Refertoreliabilityteststandardspecificationforinthisline.

●CriteriaforJudgingTheDamage

Item	Symbol	Test Condition	Criteria for Judgment	
			Min.	Max.
Forward Voltage	V _F	I _F =20mA	---	Initial data x 1.1
Reverse Current	I _R	V _R = 5V	---	Initial data x 2.0
Luminous Intensity	I _V	I _F =20mA	Initial data x 0.7	---



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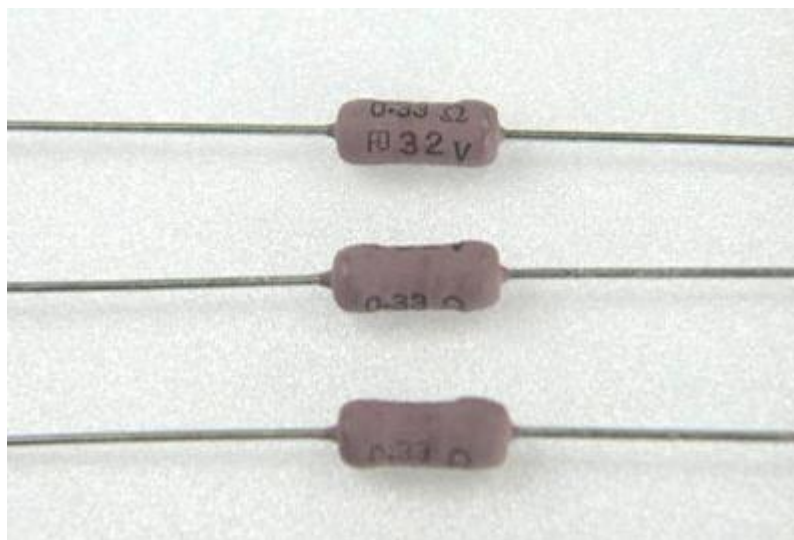
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6.ResistorSpecification(RMS1/4W200kΩ):



CHARACTERISTICS 性能

ITEM 项目	SPEC 规格	REMARKS 备注
Load life under high temperature 高温负荷寿命	±1.5%	JIS C 5201-1 (4.25.1) Rated voltage at 70℃ for 1,000 hours 额定电压70℃ 1,000 小时
Load life under high humidity 耐湿负荷寿命	±5%	JIS C 5201-1 (4.24) Rated voltage at 40℃,95% RH for 1,000 hours 额定电压40℃,95% RH 1,000小时
Temp. coeff of resistance 温度系数	< 1K=±500 PPM/℃ ≤100KΩ=±300 ppm/℃ >100KΩ=±200 ppm/℃	JIS C 5201-1 Room temp. + 100℃, 30min 室温 + 100℃, 30分钟
Short time overload 短时间过负荷	±1%	JIS C 5201-1 (4.13) 6.25 times the rated power for 5 seconds 6.25倍额定功率 5 秒
Temperature cycling 温度循环	±1%	JIS C 5201-1 (4.19) 5 cycles for -25℃±3℃(30min); room temp.(30min) ~ +85℃±3℃(30min) room temp. (30min)
Resistance to soldering heat 焊锡耐热	±1%	JIS C 5201-1 (4.18) 260℃±5℃ for 10 seconds(焊锡槽) 350℃±10℃ for 3.5 seconds(手焊锡)
Insulation resistance 绝缘电阻	>1,000MΩ	JIS C 5201-1 (4.6.1.1) 500 volt Insulation test 1min 500 V绝缘测试电压1分钟



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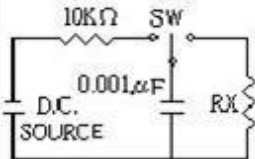
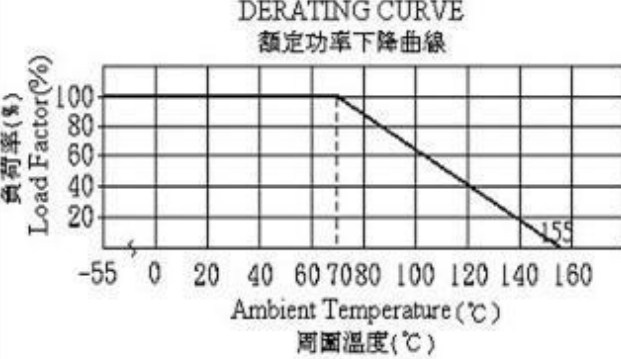
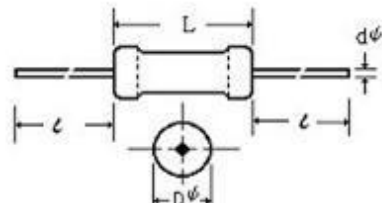
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Pulse withstanding voltage 脉冲	±20%	■The following discharge cycle is repeated in the circuit of the left fig. 2.5 sec. ON 2.5 sec. OFF 50 cycles. With following DC pulse test voltage ■ Pulse voltage:1/6W,S1/4W: 3KV. ≥1/4W: 100KΩ: (3KV); 100KΩ-620KΩ: (5KV); > 620KΩ: (10KV) 
 DERATING CURVE 额定功率下降曲线		 Various type of forming & taping are available 提供插装的造型与带装 Coating color: RMU1/4W,RMU1/6W、dark blue, other、pink。 涂装颜色: RMU1/4W,RMU1/6W蓝色,其他粉红色。

■ CHARACTERISTICS 性能

Model 型名	Power Rating 额定功率 (W)	Resistance Range E-24 阻值范围 Ω	Maximum Working Voltage 最高使用 电压	Dielectric Withstandi ng Voltage 耐电压	Dimension 尺寸 (mm)			
					L	D φ	t	d φ
RMU1/4W 、 RMS1/2W	1/4,1/2	10Ω ~ <100M	1600V	700V	6±0.3	2.4±0.1	28±2	0.6±0.05