



陶瓷封装光敏电阻 LXD55CR 系列

CdS Photoconductive cells  
PRODUCTION DATE SHEET

# 敏感电子元器件

Sensitive Electronic Components

光敏电阻（LXD55CR 系列）参数

Photoresistor (LXD55CR Series) Parameters

型号及命名的含义:

LXD 55 X X X

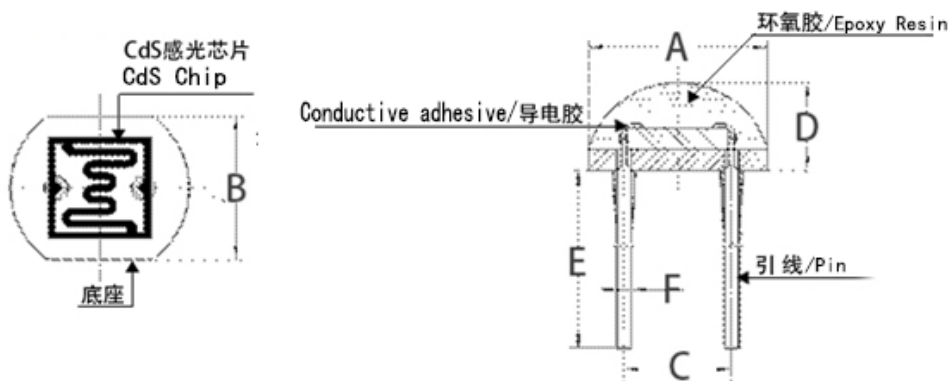
					__参数区分代码
					__窗口形式: Q 红外抑制型树脂 R 普通透明环氧树脂
					__封装形式: C 陶瓷座 M 金属封装 S 树脂封装
					__光敏电阻外形尺寸 5.0mm*4.2mm ±0.2mm
					__龙信达 LONGXINDA 简写 LXD

Type and Naming Meaning:

LXD 55 X X X

					__Parametric Discrimination Code
					__Window: Q: IR Blocking Type R: Epoxy Resin (Transparent)
					__Packaging Material: C;Ceramic base M: Metal Packaging / S: Resin Packaging
					__Shape size of photoresistor: 5.0mm*4.2mm ±0.2mm
					__LONGXINDA Co.,. Abbreviation: LXD

尺寸图/ Dimensions (单位/Unit:mm/inch):





编码/ Code	尺寸 Dimensions (毫米/mm)	英寸 ( inch ±0.0078)
A	□5.0mm ±0.2	0.1968
B	4.0mm ±0.2	0.1574
C	3mm ±0.25	0.1181
D	2.5mm ±0.3	0.0984
E	最小值 24mm	0.9448
F	□0.4mm ±0.1	□0.0157

符号说明/Explanation:

**R10** 亮电阻: 用 400-600Lux 光源下受光照射 2hr 后, 在标准光源 A (色温 2854K) 下, 用 10Lux 照度测量的阻值。

**R10** Light Resistance: Measured at 10lux with standard light A (2856K color temperature) and 2hr pre-illumination at 400-600lux prior testing.

**R0** 暗电阻: 指关闭 10Lux 光后, 第 5 秒的电阻值:

**R0** Dark Resistance: Measured 10 seconds after closed 10Lux.

**γ 值:** 10Lux 照度和 100Lux 照度下的标准

$\gamma = \frac{\lg(R10/R100)}{\lg(100/10)} = \lg(R10/R100)$  电阻值之比的对数。

$$\gamma = \frac{\lg(R10/R100)}{\lg(100/10)} = \lg(R10/R100)$$

R10, R100 分别为 10Lux、100Lux 照度下的电阻值 (γ 的公差为 ±0.15)

**Γ Value:** The ratio gets from the standard resistance in 10 lux illuminance and 100lux illuminance's rate.

R10, R100 the resistance value in 10lux and 100 lux respectively. (γ's tolerance is ±0.15)

**P<sub>D</sub>** 功耗: 环境温度为 25℃ 时的最大功率损耗

**P<sub>D</sub>** Power dissipation: Max. Power Dissipation at ambient temperature of 25℃

**V<sub>max</sub>** 最大外加电压: 在黑暗中可连续给元件的最大电压。

**V<sub>max</sub>** Max. Voltage in darkness that may be applied to the cell continuously.



**T<sub>op</sub>** 操作温度范围 Operating temperature range / Top range

主要参数/Main Parameter:

产品型号	芯片尺寸 Chip size	额定参数 @25℃ Rated Parameters			光电参数典型 @25℃ Typical Photoelectric Parameters				
		V <sub>max</sub> (V)	P <sub>max</sub> (mW)	Top Range (°C)	λ <sub>p</sub> (nm)	R10		R0	Y <sub>10/100</sub> typ
						10Lux, 2856k*1	0 Lux *2	Min. (KΩ)	
<b>530nm 100V~150V</b>									
LXD55CR-16	3*3mm	100	90	-30~+70	530 nm	5	10	0.1	0.65
LXD55CR-28						8	20	0.12	0.65
LXD55CR-37A						18	35	0.65	0.65
LXD55CR-37B		150				35	55	0.85	0.65
LXD55CR-39						55	95	1.2	0.7
LXD55CR-49A						95	145	2.7	0.75
LXD55CR-49B						145	200	3	0.75
<b>600nm 100V~150V</b>									
SG56CR-16	3*3mm	100	90	-30~+70	600nm	5	10	0.1	0.65
SG56CR-28		150				8	20	0.15	0.65
SG56CR-37A						20	30	0.4	0.7
SG56CR-37B						30	50	0.9	0.8
SG56CR-39						50	90	1.2	0.8
SG56CR-49A						90	160	4.8	0.85
SG56CR-49B						160	300	5	0.85
<b>600nm 300V</b>									
SG56CR-6031	3*3mm	300	90	-30~+70	600nm	60	130	1.2	0.65
SG56CR-6032						120	210	3	0.7
SG56CR-6033						200	580	9	0.8
SG56CR-6034						500	1200	15	0.85

**可靠性测试方法/Reliability Testing Method:**

测试项目	测试条件
亮电阻/ Light Resistance 暗电阻/ Dark Resistance	亮电阻: 用 400-600Lux 光源下受光照射 2hr 后, 在标准光源 A (色温 2854K) 下, 用 10Lux 照度测量的阻值. Light Resistance: Measured at 10lux with standard light A (2856K color temperature) and 2hr pre-illumination at 400-600lux prior testing.  暗电阻: 关闭 10Lux 光照 10 秒的电阻最小值. Dark Resistance: Measured 10 seconds after closed 10Lux.
温度变化试验 Temperature Change Test	温度: 70°C±5°C / 时间:30 分钟 Temperature: 70°C±5 °C/ Time: 30 minutes 照射光:黑暗放置 Light Condition: Dark Place 试验时间:24 小时 / 低温:-30°C±5°C Test Time: 24 hours / Low Temperature: -30°C + 5 °C 时间:30 分钟 Time: 30 minutes 照射光:黑暗放置以上为一个循环试验时间 24 小时 Light Condition: : Darkness is placed above a cycle time of 24 hours
恒定温热试验 Constant Thermothermal Test	温度:40±5°C,湿度: 90-95% Temperature: 40 + 5°C, Humidity: 90-95% 照射光:黑暗放置 Light Condition: Dark Place 试验时间:48 小时 Test Time: 48 hours
引线高温试验 High Temperature Test For Lead Wire	在引线根部作 90 度弯曲, 从离根部 4mm 处负载 100g 的负荷。 Bend at the root of the lead 90 degrees, load the load of 100g from the root 4mm. 烙铁温度: 260°C 加热 / 时间: <3-5s, 焊点离基部: 5mm 以外。



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Welding Temperature: 260 °C / Time: <3-5s,  
Solder joints from the base: At least 3mm

## 注意事项/Precaution for use:

1. 本产品采用环保材料包装, 小包装 200 支, 大包装 2000 支;

Our products use the environmental protection packaging materials, small package is in 200 pieces, big one is 2000 pieces;

2. 避免将本产品放在潮湿、高温环境下保存;

Avoid storing the product in the damp and high temperature environment;

3. 焊接时间尽可能短;

烙铁温度: 260°C 加热 / 时间: <3s,  
焊点离基部: 3mm 以外。

The welding time should as short as possible;

Welding Temperature: 260 °C / Time: <3s,  
Solder joints from the base: At least 3mm

4. 注意引线焊接位置应距陶瓷基座 4mm 以上。

The lead bonding position should above the ceramic base 4mm;

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