3-in-1 Light Sensor

Ambient Light Sensor(ALS) + Proximity Sensor(PS) + IR LED 2.5 x 2.0 x 1.0 mm PA122 Series

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Features

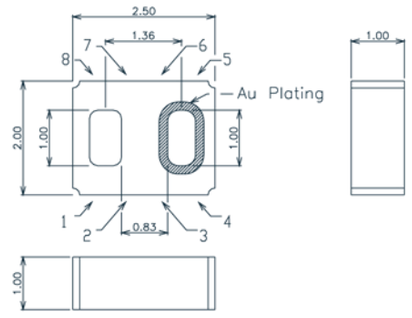
- Ceramic Based 3-in-1 Light Sensor
- ALS Sensing Tolerance ±10%
- PS Crosstalk Cancelling 50% ADC counts
- Support 16-Bit Format Via I²C Interface
- 50/60Hz Noise Rejection Filter
- Power Saving Mode, Low Power Consumption
- Programmable LED Driver Strength & LED Modulation Frequency
- Applications : Smartphone, Phablet, Tablet, Digital Single Lens Reflex Camera, Smart Wearable Sport & Fitness.

Electrical Specifications

Item / Type	PA122
Operating Temperature Range	-40~85℃
Storage Temperature Range	-40~85℃
Supply Voltage	2.7~3.3 V
Supply Current (ALS Only)	250 μA Max.
Supply Current (PS Only)	250 μA Max.
Shutdown Current	1 μA Max.
I²C Clock Rate Range	1~400 kHz
Peak Wave Length for ALS	550nm
ADC Conversion Time	100ms
ALS_Dark	< 3 Steps
ALS_Full_Scale	65,535 Steps
ALS Tolerance*	± 10 %
IR-LED Peak Wave Length	850 & 940 nm (LED)
IR-LED Driving Current	25, 50, 100, 150 mA
PS Detection Distance**	0~100 mm

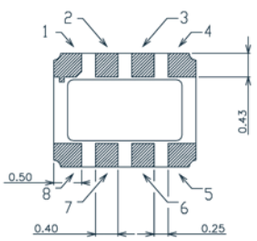
* Light Source : White LED (6500K)
**Kodak 90% White Card

Dimensions

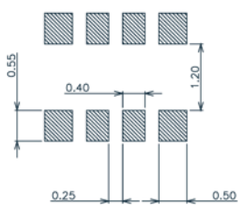


Pin Function

Name	Function
Pin 1	VDD
Pin 2	SCL
Pin 3	GND
Pin 4	LEDP
Pin 5	LEDN
Pin 6	LEDC
Pin 7	NINT
Pin 8	SDA



Land Pattern



Units: mm
Tolerance:± 0.15

Remark : Specification subject to change without prior notice. Please confirm with our sales. http://www.txccorp.com