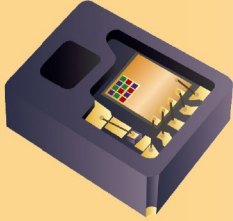


# 4-in-1 Light Sensor Color Sensor(CS) + Ambient Light Sensor(ALS) + Proximity Sensor(PS) + IR Light source 2.5 x 2.0 x 1.0 mm PA22 C Series

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Sensor



## Features

- Ceramic Based 4-in-1 Light Sensor
- Color Sensing Tolerance  $\pm 10\%$
- PS Crosstalk Cancelling 50% ADC counts
- Support 16-Bit Format Via I<sup>2</sup>C Interface
- 50/60Hz Noise Rejection Filter
- Power Saving Mode, Low Power Consumption
- Excellent PS performance for black hair in zero distance
- Applications : Smartphone, Phablet, Tablet, Digital Single Lens Reflex Camera, Smart Wearable Sport & Fitness.

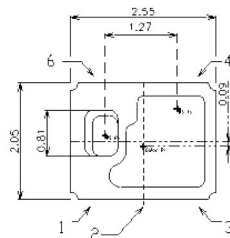
## Electrical Specifications

Item / Type	PA22C
Operating Temperature Range	-30~85°C
Storage Temperature Range	-40~85°C
Supply Voltage	2.7~3.3 V
Supply Current (ALS Only)	250 $\mu$ A Max.
Supply Current (PS Only)	650 $\mu$ A Max.
Shutdown Current	1 $\mu$ A Max.
I <sup>2</sup> C Clock Rate Range	1~400 kHz
ADC Conversion Time	50ms or 100ms
RGB_Dark	< 3 Steps
RGB_Full_Scale	65,535 Steps
RGB Tolerance*	$\pm 10\%$
IR-Emitter Peak Wave Length	940 nm
IR-Emitter Driving Current	7, 10, 12.5, 15 mA
PS Detection Distance**	0~100 mm

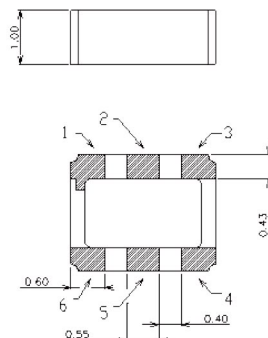
\* Light Source : White LED (6500K)

\*\*Kodak 90% White Card

## Dimensions

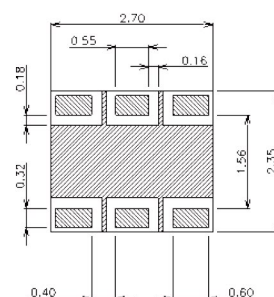


Name	Function
Pin 1	VDD
Pin 2	SCL
Pin 3	GND
Pin 4	GND
Pin 5	NINT
Pin 6	SDA



### Land Pattern

Green area : solder mask



Units: mm  
Tolerance:  $\pm 0.10$

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