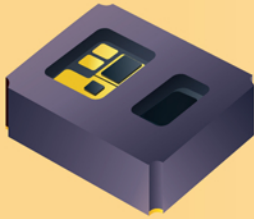


3-in-1 Light Sensor Ambient Light Sensor(ALS) + Proximity Sensor(PS) + IR Light source 2.5 x 2.0 x 1.0 mm PA22A Series

Think of Frequency Think of **TXC**
come visit our site <http://www.txccorp.com>



Features

- Ceramic Based 3-in-1 Light Sensor
- ALS Sensing Tolerance $\pm 10\%$
- PS Crosstalk Cancelling 50% ADC counts
- Support 16-Bit Format Via I²C Interface
- 50/60Hz Noise Rejection Filter
- Power Saving Mode, Low Power Consumption
- Excellent PS performance for black hair in zero distance
- Applications : Smartphone, Phablet, Tablet, Digital Single Lens Reflex Camera, Smart Wearable Sport & Fitness.

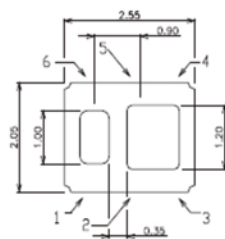
Electrical Specifications

Item / Type	PA22A
Operating Temperature Range	-30~85°C
Storage Temperature Range	-40~85°C
Supply Voltage	2.7~3.3 V
Supply Current (ALS Only)	250 μ A Max.
Supply Current (PS Only)	650 μ A Max.
Shutdown Current	1 μ A Max.
I ² C 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*	$\pm 10\%$
IR-LED Peak Wave Length	940 nm(VCSEL)
IR-LED Driving Current	20, 50, 100, 150 mA
PS Detection Distance**	0~100 mm

* Light Source : White LED (6500K)

**Kodak 90% White Card

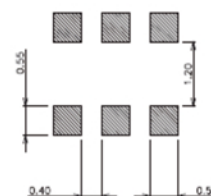
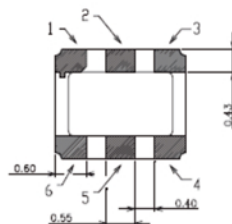
Dimensions



Pin Function

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

Land Pattern



Units: mm
Tolerance: ± 0.10