

# Ambient Light Sensor

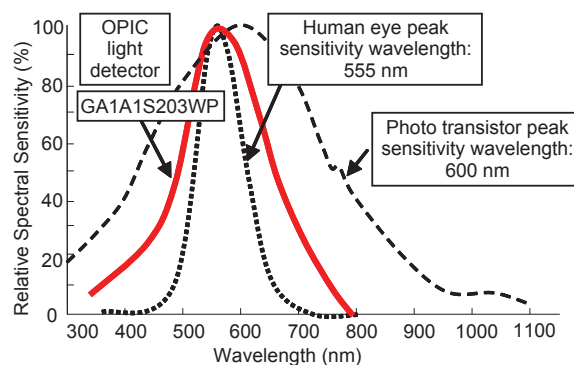
GA1A1S203WP

## Features

- Logarithmic output
- Thinnest in the industry with a compact package ( $1.6 \times 2.0 \times 0.42$  mm)
- Stable output current over the specified temperature range
- Adapted to human eye sensitivity
- Integrated photo-diode and amplifier circuit
- Reflow soldering/lead-free

## Sensitivity characteristics

Adapted to human eye sensitivity



## Main Specifications

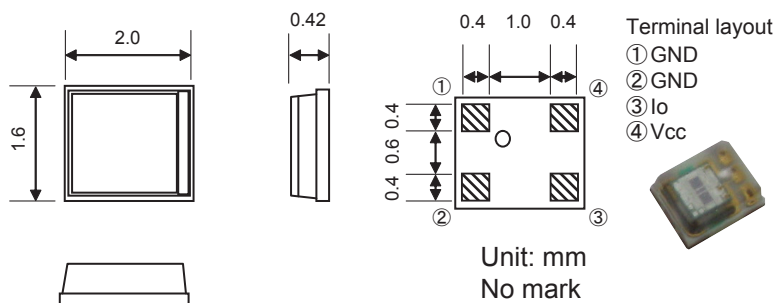
Items	Symbol	Specifications	Condition
Supply voltage	Vcc	2.3 to 3.2 V	
Dissipation current	Icc	TYP. 70 $\mu$ A	Vcc = 2.9 V, Ev = 1 000 lx
Output current	Io	TYP. 20 $\mu$ A	Ev = 100 lx
Specified temperature	—	0.25%/ °C	-30 °C to +70 °C, Ev = 1 000 lx
Output accuracy	—	MAX. $\pm$ 20%	—
Peak sensitivity wavelength	$\lambda$	555 nm	—
Response time	tr, tf	MAX. 150 $\mu$ s	Vcc = 2.9 V, Ev = 100 to 55 000 lx, R = 27 k $\Omega$
Operating temperature	Topr	-40 to +85 °C	

## Applications



- Mobile phones

## Outline Dimensions



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