

PROXIMITY SENSOR / OPTO PROXIMITY SENSOR WITH INTEGRATED AMBIENT LIGHT SENSOR

☆ New product



■ Proximity Sensor

(Ta = 25°C)

Model No.	Features	Absolute max	kimum ratings	Electro-optical characteristics				
		Vcc (V)	Topr (°C)	Dissipation current Icc (µA) TYP.	Detecting distance Lon (mm) MIN.	Non- detecting distance Loff (mm) MAX.	Peak emission wavelength λp (nm)	
GP2AP002S30F	Compact size (4.0 × 2.0 × 1.25 t mm) Drastically reduced LED current consumption by employing a light modulation system Built-in LEDs for simple optical design and I ² C output (LED emission duty: MAX. 0.3%)	3.8	-25 to +85	240	25	150	940	



■ Proximity Sensor with Integrated Ambient Light Sensor

 $(Ta = 25^{\circ}C)$

Model No.	Features	Absolute maxi- mum ratings		Electro-optical characteristics						
					Proximity se	ensor portion	Ambient light sensor portion			
		Vcc (V)	Topr (°C)	Dissipation current lcc (µA) TYP.	Detecting distance Lon (mm) TYP.	Peak emission wavelength λp (nm)	Recom- mended illuminance range Ev (lx)	Output resolution (bit)	ADC conversion time Tint (ms) TYP.	
GP2AP030A00F	LED and ambient light sensor combined in a single package (4.0 × 2.1 × 1.25 t mm) Built-in LEDs for simple optical design Illuminance output: digital 16-bit output (Minimum detectable illuminance: 0.02 lx) I ² C output compatible (proximity sensor, ambient light sensor)	5.5	-35 to +85	65	100	940	0.02 to 10 000	16	100	
☆GP2AP007A00F	LED and ambient light sensor combined in a single package (2.5 × 2.0 × 1.0 t mm) Compact with reduced mounting area Illuminance output: digital 16-bit output (Minimum detectable illuminance: 0.1 lx) Small aperture compatible l²C output compatible (proximity sensor, ambient light sensor)	2.2 to 5.5	-30 to +85	100	100	940	0.1 to 100 000	16	30	
☆GP2AP008T00F	LED and ambient light sensor combined in a single package (3.94 × 2.36 × 1.35 t mm) Illuminance output: digital 16-bit output (Minimum detectable illuminance: 0.1 lx) Small aperture compatible l²C output compatible (proximity sensor, ambient light sensor)	2.2 to 5.5	-30 to +85	100	100	940	0.1 to 100 000	16	30	



Notice
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PROXIMITY/GESTURE SENSOR WITH OPTO INTEGRATED AMBIENT LIGHT SENSOR / UV LIGHT SENSORS



■ Proximity/Gesture Sensor with Integrated Ambient Light Sensor

 $(Ta = 25^{\circ}C)$

Model No.	Features	Absolute maxi- mum ratings		Electro-optical characteristics						
		Vcc (V)	Topr (°C)	Dissipation current Icc (µA) TYP.	Dissipation current Icc (Gesture) (µA) TYP.	Proximity/gesture sensor portion		Ambient light sensor portion		
						Detecting distance Lon (mm) TYP.	Peak emission wavelength λ p (nm)	Recom- mended illuminance range Ev (Ix)	Output resolution (bit)	ADC conversion time Tint (ms) TYP.
GP2AP054A00F	LED and ambient light sensor combined in a single package (4.0 × 2.1 × 1.25 t mm) Simultaneous operation of the gesture recognition and illuminance functions is possible Low power consumption mode is available for the proximity sensor Capable of holding a total of 4 gesture detection results	5.5	-35 to +85	100	320	100	940	0.02 to 10 000	16	30



■ UV Light Sensors

 $(Ta = 25^{\circ}C)$

	Features	Absolute maximum ratings			Electro-optical characteristics					
Model No.		Vcc (V)	I ² C voltage VI ² C (V)		Dissipation current lcc (µA) TYP.	Built-in clock frequency fosc (MHz) TYP.	Output resolution (bit)	ADC conversion time (ms) TYP.	Recommended illuminance range Ev (lx) Sunlight (AM1.5 equivalent)	
GA1AUV100WP	Detects only UV rays contained within sunlight (no sensitivity to visible light) Built-in ambient light sensor Compact size: 2.0 × 1.6 × 0.6 t mm I ² C output compatible	2.2 to 5.5	1.7 to Vcc	-35 to +85	65	2.62	16	25	UV: 0 to 200 000 Illuminance: 0 to 120 000	



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