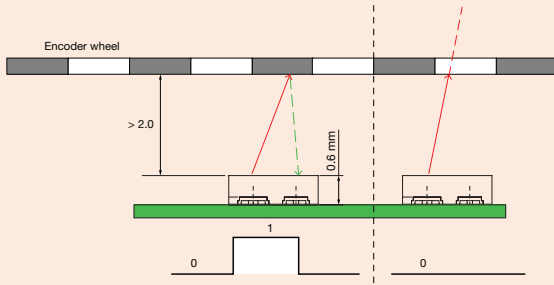


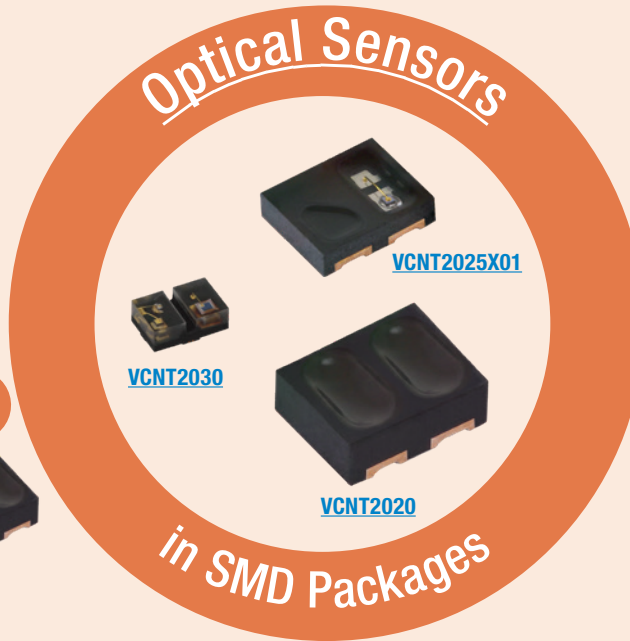
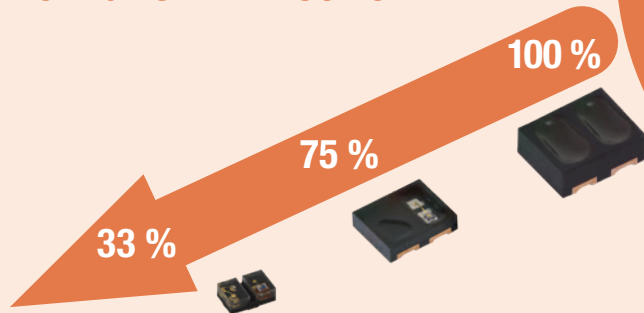


# Analog Miniature Reflective Sensors

## Silicon Phototransistors



### PACKAGE SIZE REDUCTION



### KEY BENEFITS

- Compact packages: reduce board space and allow for single window design
- Low profile designs: down to 0.6 mm
- Ideal to cope with “under window” solutions (“no” crosstalk within 1 mm)
- Excellent internal crosstalk suppression
- Foil Assisted Molding (FAM) package improves signal to noise ratio

### CONSUMER APPLICATIONS

- Optical encoders
- Object detection
- Position sensors
- Touchless optical buttons under transparent covers and allow for single window design

Characteristic	VCNT2030	VCNT2025X01	VCNT2020
Emitter technology	VCSEL	IREL	IREL
Package dimension (mm)	1.85 x 1.2 x 0.6	2.5 x 2 x 0.6	2.5 x 2 x 0.8
Emission angle (°)	± 11 (VCSEL)	± 60	± 60
Daylight blocking filter	No	Yes	Yes
Ambient temperature range	-40 °C to +85 °C	-40 °C to +110 °C	-25 °C to +85 °C
Automotive qualified	No	AEC-Q101	No
Recommended distance to place a cover to minimize its influence / crosstalk	0 mm to 2 mm	> 2 mm	> 2 mm
Typ. sensing distance (mm)	0.3 to 15 Kodak gray card (20 % reflectivity)	0.3 to 4.5 Mirror with > 90 % reflectivity	0.2 to 2.5 Mirror with > 90 % reflectivity
Typ. DC - forward current (mA)	5 to 15	5 to 65	5 to 100



SENSORS



ROBOTS



TOUCHSCREENS



WEARABLES



MECHANICAL  
LIDAR ENCODING



ADAS TO  
AUTONOMOUS

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