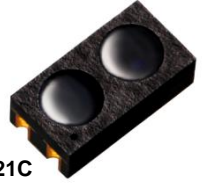




Stanley Electric's Photorelector Sensor

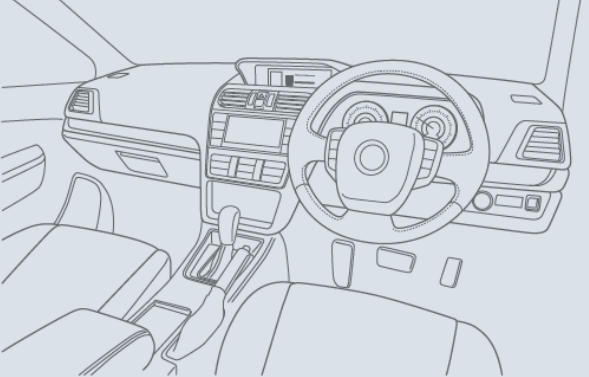
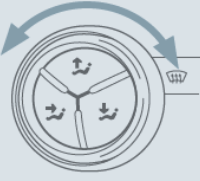

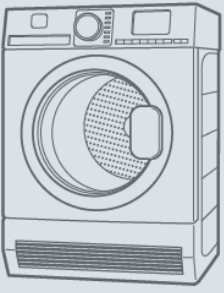
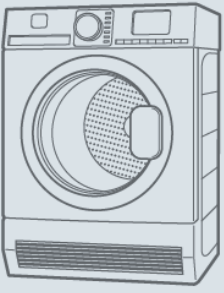




**Long lifetime, high reliability
enabled through contactless sensing**

Compatible with high operating temperatures (Max. 100 °C)



KUA0121C

◆ Applications

Automotive interior equipment   Rotary dial switches	Home appliances  Microwaves  Audio components  Washing machines
 Scroll switches	Industrial equipment  Factory automation control panels  Control devices  Card readers

◆ Features

- **Contactless sensing**

Increased flexibility of design compared to mechanical sensors
Sensing through IR LED emission and photodetector detection
Short range detection (max. 1 to 2 mm)

- **Compact size (1.1 mm height)**

Downsizing of final unit
Component cost reduction

- **Compatible with JEDEC MSL 2a**

◆ Specifications



Part name		KUA0121C	Units
Peak wavelength	λ_p	940	nm
Photocurrent	I_C	300 ($V_{CE}=5V, I_F=5mA, d=1mm$)	μA
Max. leakage current	I_{LEAK}	2 ($V_{CE}=5V, I_F=5mA, no\ reflector$)	μA
Response time	tr/tf	10 / 10 ($V_{CE}=10V, RL=100\Omega$)	μsec
Operating temperature	T_{opr}	-40 to +100	$^{\circ}C$
Storage temperature	T_{stg}	-40 to +120	$^{\circ}C$
Size	L×W×H	3.6 × 1.9 × 1.1	mm
JEDEC MSL	—	2a	—

Conditions : Ta=25°C