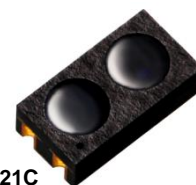




## Stanley Electric's Photoreflector Sensor

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

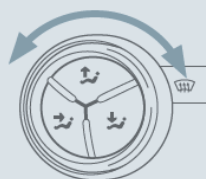
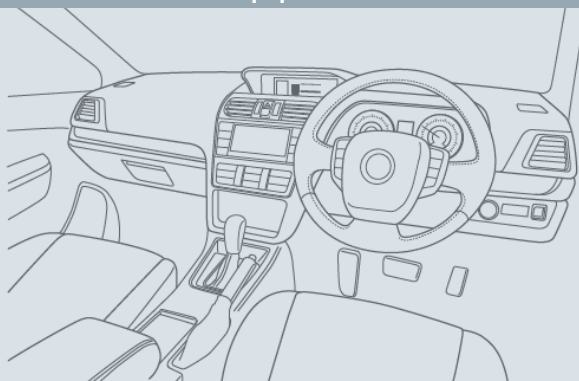
**Compatible with high operating temperatures (Max. 100 °C)**



KUA0121C

### ◆ Applications

#### Automotive interior equipment



Rotary dial switches



Scroll switches

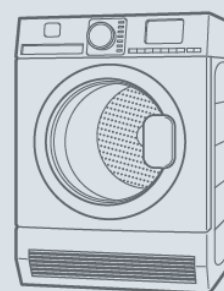
#### Home appliances



Microwaves



Audio components



Washing machines

#### 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	$\lambda_p$	940	nm
Photocurrent	$I_C$	300 ( $V_{CE}=5V$ , $I_F=5mA$ , $d=1mm$ )	$\mu A$
Max. leakage current	$I_{LEAK}$	2 ( $V_{CE}=5V$ , $I_F=5mA$ , no reflector )	$\mu A$
Response time	$t_r/t_f$	10 / 10 ( $V_{CE}=10V$ , $R_L=100\Omega$ )	$\mu sec$
Operating temperature	$T_{opr}$	-40 to +100	°C
Storage temperature	$T_{stg}$	-40 to +120	°C
Size	$L \times W \times H$	$3.6 \times 1.9 \times 1.1$	mm
JEDEC MSL	—	2a	—

Conditions :  $T_a=25^\circ C$