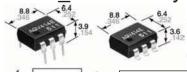


# Relays & Solenoids



# AIS PCB Relays

Detailed product specifications are available on: us. 100y. com. tw



1. 60V type couples high capacity (0.55A) with low on-resistance (1 $\Omega$ ).

Item	GU-E (1 Form B type) type				
Part No.	AQV410EH	AQV412EH			
Load voltage	350V	60V			
Continuous load current	0.13A	0.55A			
ON resistance (typ.)	18Ω	1Ω			

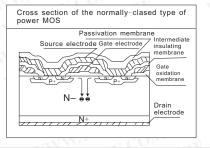
#### 2. This is the low-cost version PhotoMOS 1 Form B output type relay.

Compared to the previous GU PhotoMOS 1 Form B type relay, the attainment of an economical

price that is approximately 22% lower will further broaden its market.

#### 3. Normally closed type (2 Form B) is low on-resistance.

(All AQ O4 PhotoMOS are Form B types. And also the Form A types have a low on-resistance.)This has been realized thanks to the built-in MOSFET processed by our proprietary method, DSD (Doublediffused and Selective Doping) method.



#### 4. Controls low-level analog signals

PhotoMOS relays feature extremely low closed-circuit offset voltage to enable control of low-level analog signals without distortion.

#### 5. High sensitivity, low ON resistance

Can control a maximum 0.13 A load current with a 5 mA input current. Low ON resistance of 18 Ω (AQV410EH). Stable operation because there are no metallic contact parts.

#### 6. Low-level off-state leakage current

The SSR has an off-state leakage current of several milliamperes, whereas the PhotoMOS relay has typ. 100 pA even with the rated load voltage of 400 V (AQV414E).

#### 7. Reinforced insulation 5,000 V type also available.

More than 0.4 mm internal insulation distance between inputs and outputs. Conforms to EN41003, EN60950 (reinforced

#### TYPICAL APPLICATIONS

- Power supply
- · Measuring equipment
- · Security equipment
- Telephone equipment
- Sensors







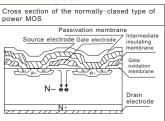


Part No.	Product No.	Manufacturer	Description	Contact Arrangement	Contact Rating	Coil Voltage	Recognized Safety	Туре
47312	AQV410EH	NAIS	NAIS_GU-E PhotoMOS RELAY	1 Form B	350V / 130mA	350V	UL(E43149),C-UL ,BSI	AQV410EH
47311	AQV412EH	NAIS	NAIS_GU-E PhotoMOS RELAY	1 Form B	60V / 550mA	60V	UL(E43149),C-UL	AQV412EH
47305	AQV414E	NAIS	NAIS_GU-E PhotoMOS RELAY	1 Form B	400V / 120mA	400V	UL(E43149),C-UL	AQV414E
47313	AQV414EH	NAIS	NAIS_GU-E PhotoMOS RELAY	1 Form B	400V / 120mA	400V	UL(E43149),C-UL,BSI,VDE	AQV414EH

### **FEATURES**

#### 1. Low on resistance for normally-closed type

This has been realized thanks to the built-in MOSFET processed by our proprietary method, DSD (Double-diffused and Selective Doping) method.



#### 2. Controls low-level analog signals

PhotoMOS relays feature extremely low closed-circuit offset voltage to enable control of low-level analog signals without distortion.

#### 3. High sensitivity, low ON resistance

Can control a maximum 0.15 A load current with a 5 mA input current.

#### 4. Low-level off state leakage current

The SSR has an off state leakage current of several milliamperes, whereas the PhotoMOS relay has typ. 100 pA even with the rated load voltage of 400 V.

#### TYPICAL APPLICATIONS

- Telepone equipment (Dial pulse)
- Measuring equipment

4. Controls low-level analog signals

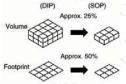
even at the rated load voltage of 400 V.

Part No.	Product No.	Manufacturer	Description	Contact Arrangement	Contact Rating	Coil Voltage	Recognized Safety	Туре
47247	AQV414	NAIS	NAIS_GU PhotoMOS Relay	1 Form B	400V/120mA	400V	UL(E43149),C-UL	AQV414

#### **FEATURES**

## 1. 1 channel (Form B) in super miniature design

The device comes in a super-miniature SO package measuring (W) 4.4 × (L) 6.3 × (H) 2.1 mm (W) .173× (L) .248× (H) .083 inch -approx. 25% of the volume and 50% of the footprint size of DIP type PhotoMOS Relays



## 2. Low on resistance (Max. 50 Ω) at 400 V for normally-closed type

has been achieved thanks to the built-in MOSFET processed by our proprietary method, DSD (Double-Diffused and Selective Doping) method.

## signals without distortion.

5. Low-level off state leakage current In contrast to the SSR with an off state leakage current of several milliamperes, the PhotoMOS relay features a very small off state leakage current of typ. 100 pA

PhotoMOS relays feature extremely low closed-circuit

offset voltage to enable control of low-level analog

6. Low thermal electromotive force (Approx. 1  $\mu$ V

# Cross section of the normally-clased type of power MOS

#### 3. Tape and reel

The device comes standard in a tape and reel (1,000 pcs./reel) to facilitate automatic insertion machines.

Part No.	Product No.	Manufacturer	Description	<i>F</i>
47245	AQV414S	NAIS	NAIS_GU PhotoMOS Relay	1

## TYPICAL APPLICATIONS

- Telephones
- · Measuring instruments
- Industrial robots
- · High-speed inspection

 Computer machines

F	Part No.	Product No.	Manufacturer	Description	Contact Arrangement	Contact Rating	Coil Voltage	Recognized Safety	Туре
4	17245	AQV414S	NAIS	NAIS_GU PhotoMOS	1-Channel (Form B)	400V / 100mA	400V	UL(E43149),C-UL	AQV414S
			Relay						



Taiwan: 886-3-5753170 Taiwan: 886-3-5753172 E-mail: Taiwan:us\_sale@100y.com.tw Shenzhen: 86-755-83298787 Shenzhen: 86-755-83640655 Shenzhen: 100y@163.com

Shanghai: 86-21-54151736 Shanghai: 86-21-64605107 Shanghai: 100y-1@163.com 29 - 85

