



## Panasonic Electric Works

### General Information

<b>Kit Part Number:</b>	<a href="#">231-1012</a>
<b>Description:</b>	Output Form Factor - 1a, 1b, 1a1b, 2a, 2b, 4a PhotoMOS Relays Kit
<b>Application:</b>	Data Communications, Game Machines, Industrial Machines, Medical Equipment, Office Equipment, Railway, Robots, Security Systems, Telecommunications, Traffic
<b>Series:</b>	PhotoMOS Relays
<b>Solution:</b>	Optical Isolation
<b>Product Type:</b>	Relays
<b>Number of Pieces:</b>	17
<b>RoHS:</b>	Yes

### Specifications

<b>Form Factor:</b>	1 Form A & 1 Form B, 1 Form A, 1 Form B, 2 Form A, 2 Form B, 4 Form A
<b>Leakage Current:</b>	1 $\mu$ A, 10 $\mu$ A, 10nA
<b>Load Current:</b>	0.1A, 0.2A, 0.5A, 1A
<b>Load Voltage:</b>	60V, 80V, 200V, 400V, 600V
<b>Package Size:</b>	SOP16-pin, DIP6-pin, DIP4-pin, DIP8-pin

### Product Highlights

PhotoMOS, Panasonic's brand of semiconductor relays, have LED as an input with MOSFET for an output. PhotoMOS relays help realize high-performance and small-footprint equipment. Panasonic Electric Works offers a wide range of PhotoMOS relays ideal for measurement, telecommunication, security and industrial control equipment.

#### Features and Benefits

- Various form factors
- Low on resistance
- Reinforced insulation
- Controls low level analog signals
- Low level input signals

#### Applications

- Railway
- Traffic
- Robots
- Industrial Machines
- Office Equipment
- Telecommunications
- Security Systems
- Game Machines
- Data Communications
- Medical Equipment.



## Panasonic Electric Works

### Bill of Materials

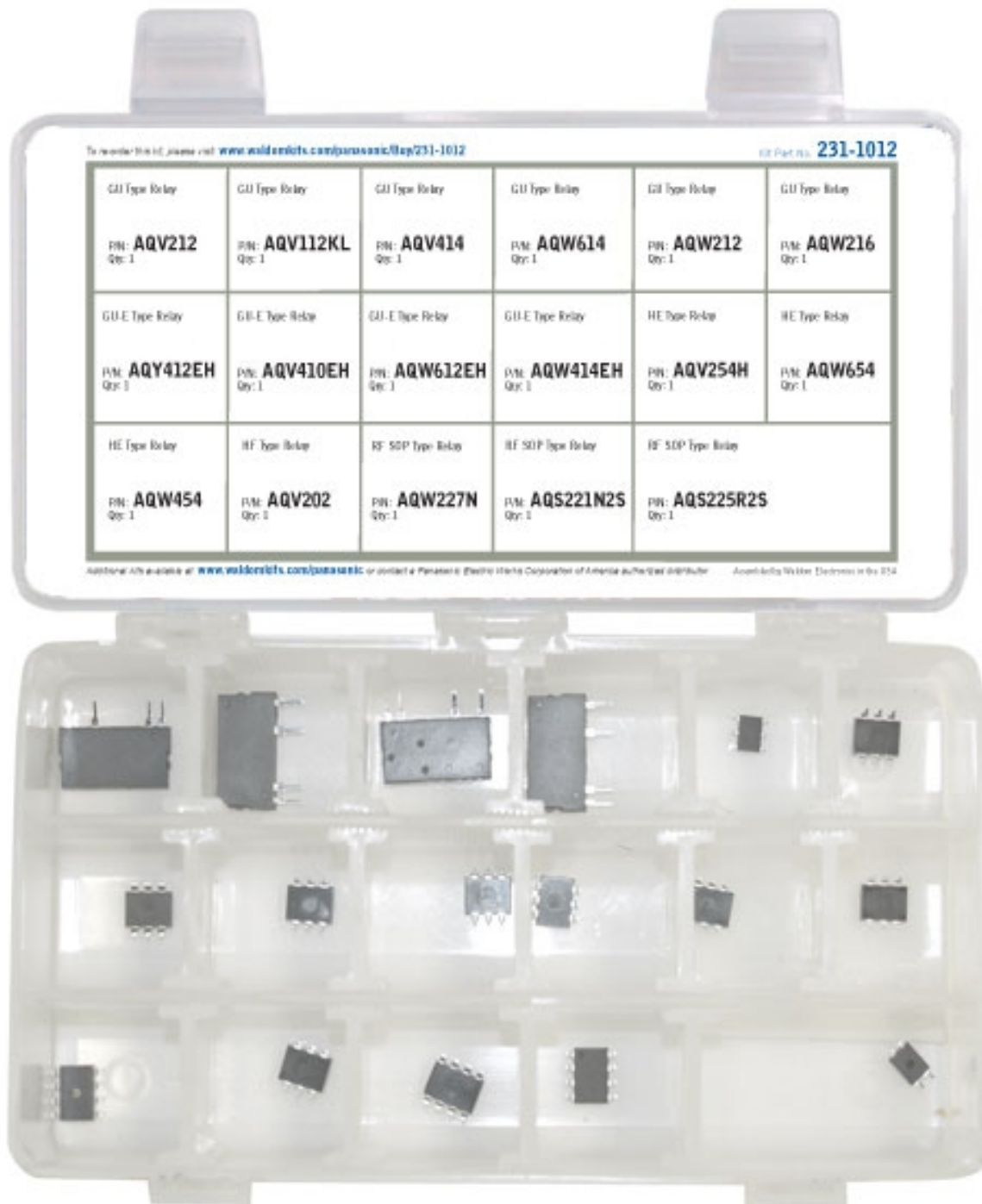
Part No.	Qty In Kit	Description	Datasheet	P/N Details	Search Distributors Inventory
<a href="#">AQV212</a>	1	GU 1 Form A PhotoMOS Relay	<a href="#">Datasheet</a>	<a href="#">Details</a>	<a href="#">Search</a>
<a href="#">AQV112KL</a>	1	GU 1 Form A with Short Circuit Protecting Non-latch PhotoMOS...	<a href="#">Datasheet</a>	<a href="#">Details</a>	<a href="#">Search</a>
<a href="#">AQV202</a>	1	HF 1 Form A AC/DC PhotoMOS Relay	<a href="#">Datasheet</a>	<a href="#">Details</a>	<a href="#">Search</a>
<a href="#">AQV254H</a>	1	HE 1 Form A Relay	<a href="#">Datasheet</a>	<a href="#">Details</a>	<a href="#">Search</a>
<a href="#">AQV414</a>	1	GU 1 Form B PhotoMOS Relay	<a href="#">Datasheet</a>	<a href="#">Details</a>	<a href="#">Search</a>
<a href="#">AQY412EH</a>	1	GU-E 1 Form B PhotoMOS Relay	<a href="#">Datasheet</a>	<a href="#">Details</a>	<a href="#">Search</a>
<a href="#">AQV410EH</a>	1	GU-E 1 Form B PhotoMOS Relay	<a href="#">Datasheet</a>	<a href="#">Details</a>	<a href="#">Search</a>
<a href="#">AQW612EH</a>	1	GU-E 1 Form A 1 Form B PhotoMOS Relay	<a href="#">Datasheet</a>	<a href="#">Details</a>	<a href="#">Search</a>
<a href="#">AQW654</a>	1	HE 1 Form A 1 Form B PhotoMOS Relay	<a href="#">Datasheet</a>	<a href="#">Details</a>	<a href="#">Search</a>
<a href="#">AQW614</a>	1	GU 1 Form A 1 Form B PhotoMOS Relay	<a href="#">Datasheet</a>	<a href="#">Details</a>	<a href="#">Search</a>
<a href="#">AQW212</a>	1	GU 2 Form A PhotoMOS Relay	<a href="#">Datasheet</a>	<a href="#">Details</a>	<a href="#">Search</a>
<a href="#">AQW216</a>	1	GU 2 Form A PhotoMOS Relay	<a href="#">Datasheet</a>	<a href="#">Details</a>	<a href="#">Search</a>
<a href="#">AQW227N</a>	1	RF SOP 2 Form A Low On-resistance PhotoMOS Relay	<a href="#">Datasheet</a>	<a href="#">Details</a>	<a href="#">Search</a>
<a href="#">AQW454</a>	1	HE 2 Form A PhotoMOS Relay	<a href="#">Datasheet</a>	<a href="#">Details</a>	<a href="#">Search</a>
<a href="#">AQW414EH</a>	1	GU-E 2 Form B PhotoMOS Relay	<a href="#">Datasheet</a>	<a href="#">Details</a>	<a href="#">Search</a>
<a href="#">AQS221N2S</a>	1	RF SOP 4 Form A CxR10 PhotoMOS Relay	<a href="#">Datasheet</a>	<a href="#">Details</a>	<a href="#">Search</a>
<a href="#">AQS225R2S</a>	1	RF SOP 4 Form A High Capacity PhotoMOS Relay	<a href="#">Datasheet</a>	<a href="#">Details</a>	<a href="#">Search</a>

### Recommended Tool

Part No.

Included in Kit



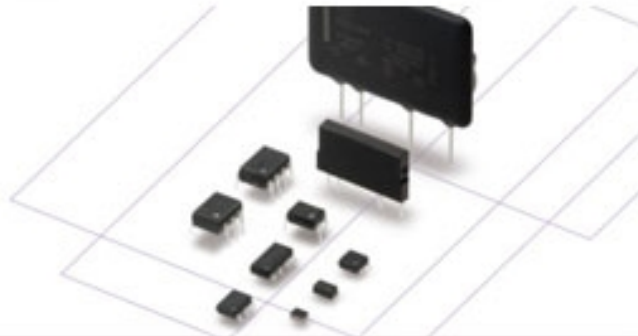


To reorder this kit, please visit [www.walderelect.com/panasonic/faq231-1012](http://www.walderelect.com/panasonic/faq231-1012)

Kit Part No. **231-1012**

GIJ Type Relay PIN: <b>AQV212</b> Qty: 1	GIJ Type Relay PIN: <b>AQV112KL</b> Qty: 1	GIJ Type Relay PIN: <b>AQV414</b> Qty: 1	GIJ Type Relay PIN: <b>AQW614</b> Qty: 1	GIJ Type Relay PIN: <b>AQW212</b> Qty: 1	GIJ Type Relay PIN: <b>AQW216</b> Qty: 1
GIJ-E Type Relay PIN: <b>AQY412EH</b> Qty: 1	GIJ-E Type Relay PIN: <b>AQV410EH</b> Qty: 1	GIJ-E Type Relay PIN: <b>AQW612EH</b> Qty: 1	GIJ-E Type Relay PIN: <b>AQW414EH</b> Qty: 1	HE Type Relay PIN: <b>AQV254H</b> Qty: 1	HE Type Relay PIN: <b>AQW654</b> Qty: 1
HE Type Relay PIN: <b>AQW454</b> Qty: 1	HF Type Relay PIN: <b>AQV202</b> Qty: 1	RF SOP Type Relay PIN: <b>AQW227N</b> Qty: 1	RF SOP Type Relay PIN: <b>AQS221N2S</b> Qty: 1	RF SOP Type Relay PIN: <b>AQS225R2S</b> Qty: 1	

Additional kits available at [www.walderelect.com/panasonic](http://www.walderelect.com/panasonic) or contact a Panasonic Electric Works Corporation of America authorized distributor. Assembly Instructions Electronics in the USA



PhotoMOS Relays

## Panasonic

Panasonic Electric Works Corporation of America

Kit Part No. **231-1012**

### PhotoMOS Relay Kit

Output Form Factor - 1a, 1b, 1a1b, 2a, 2b, 4a  
PhotoMOS Relays

- 0.1, 0.2, 0.5, 1 Amps; 60, 80, 200, 400, 600 Volts
- DIP4-pin, DIP6-pin, DIP8-pin, SOP16-pin Package Size
- 1  $\mu$ A, 10  $\mu$ A, 10 mA Leakage Current
- 1 Form A, 1 Form B, 1 Form A 1 Form B, 2 Form A, 2 Form B, 4 Form A Output Configuration
- High Dielectric Strength
- Low On Resistance
- Low Output Capacitance

Product information available at: <http://pewa.panasonic.com>

Additional kits available at: [www.waldomkits.com/panasonic](http://www.waldomkits.com/panasonic)

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**17**  
pieces



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Product from Panasonic.  
Kits designed and assembled  
by Waldem Electronics.