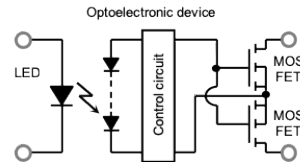


PhotoMOS® Solid State Relays

Panasonic's patented PhotoMOS Relays are optically isolated MOSFET Relays. The input circuit has an LED which transmits light when activated to a series of photocells that, in turn, charges a pair of MOSFETs on the output circuit.

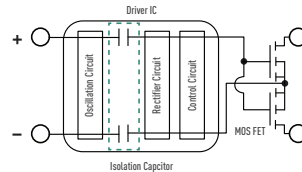
- Long Life
- No Contact Wear
- No Arc
- Small Size
- Low Power Consumption
- Fast Switching Life
- No Bounce
- No Noise



PhotoMOS® Capacitive Coupled Isolation Type

Panasonic has introduced a new technology that uses a voltage-driven method, with capacitive-coupled isolation (no LEDs in the input circuit) as opposed to current-driven, Optically Isolated Relays. The PhotoMOS CC Type Relays offer distinct benefits for certain markets including Test & Measurement, Safety & Security and Industrial. These advantages include:

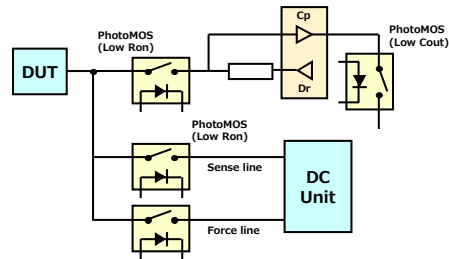
- Low Current Consumption (input current Max 0.2mA)
- High-Temperature Performance Guaranteed (Max 105°C or 221°F)
- Voltage Driven (3V to 5V)
- Low Output Capacitance and Low On Resistance
- Energy Savings and Increased Drivability (No LEDs on input side)



PhotoMOS® Applications

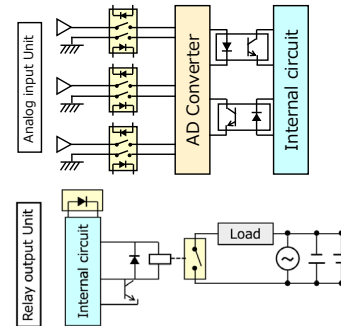
Test & Measurement

- Automatic Test Equipment (SoC/Memory/Analog, etc.)
- Data Logger
- Board Tester
- Cable Tester



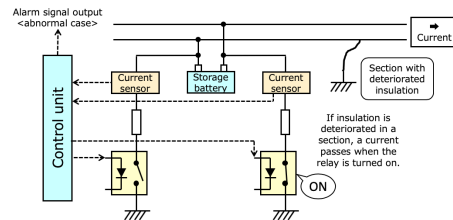
Industrial / Factory Automation

- Programmable Logic Controller (PLC)
- Robotics
- Distributed Control System (DCS)



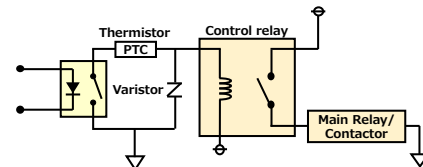
Storage Battery Unit

- Industrial UPS
- Home Storage System
- Data Center UPS



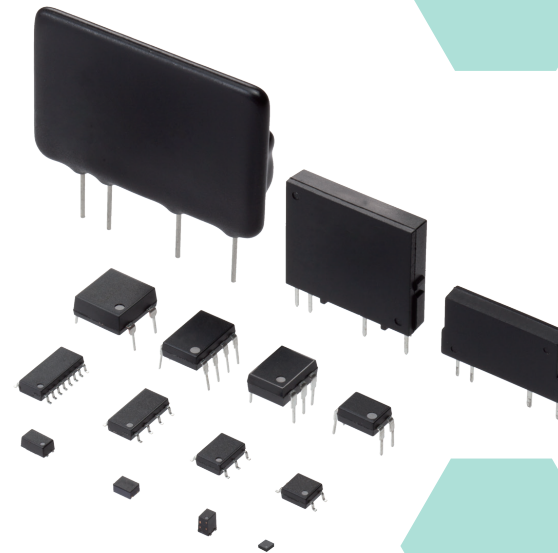
HVAC System

- Thermostat
- Signal Control



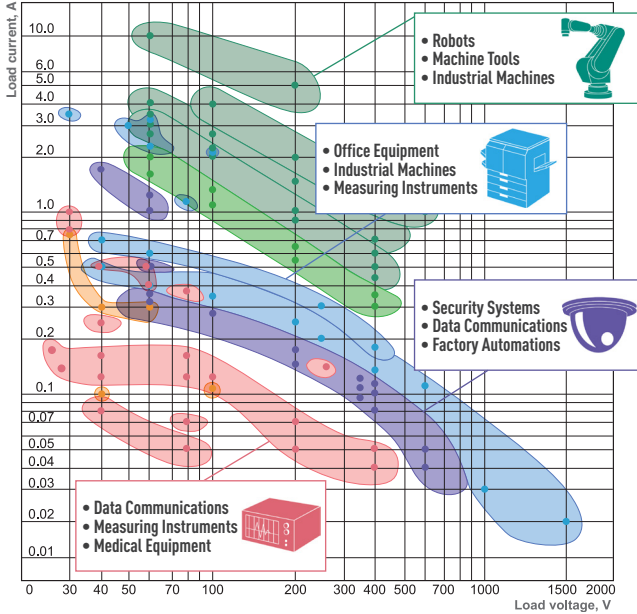
PhotoMOS®

Optically Isolated Solid State Relays



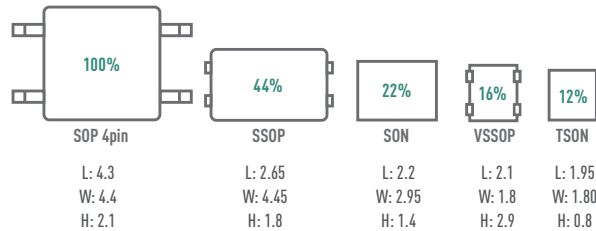
Panasonic Industrial Devices Sales Company of America
Two Riverfront Plaza, 7th Floor, Newark, NJ 07102
na.industrial.panasonic.com

PhotoMOS® Product Map



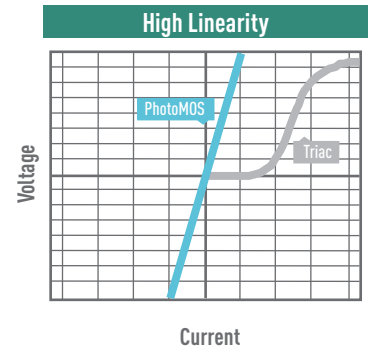
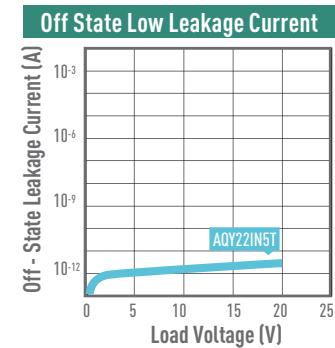
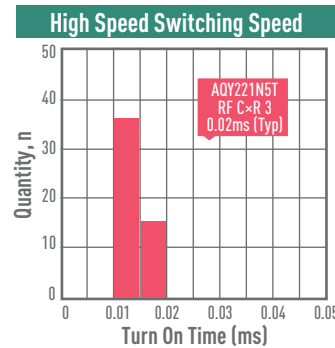
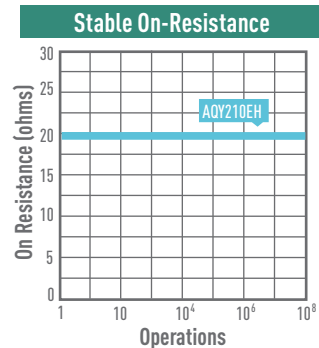
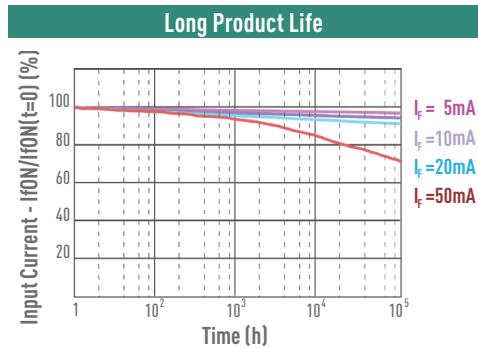
Panasonic offers customized type products in addition to the above line-up. Please feel free to contact us for more details.

PhotoMOS® Sizing Comparison



Please note, not all part numbers are shown in this brochure. Please consult with your local sales representative for other possible combinations.

PhotoMOS® Feature



Featured PhotoMOS® Products

Part Number	Package	Load Voltage (V)	Load Current (A)	On Resistance Typ (Ω)	Output Capacitance Typ (pF)	Turn On/Off Time Typ (mS)	Leakage Current Max (nA)
RF Low Ron Type							
AQY2C1R6P	TSON	30	0.75	0.2	40	0.12 / 0.1	10
AQY2C1R2P	TSON	40	0.3	0.8	14.5	0.06 / 0.06	10
AQY2C2R2P	TSON	60	0.3	0.9	27	0.08 / 0.1	10
AQY221R6T	VSSOP	30	0.8	0.18	37.5	0.1 / 0.06	10
AQY221R2T	VSSOP	40	0.25	0.8	14	0.1 / 0.06	10
AQY222R2T	VSSOP	60	0.4	0.8	27	0.12 / 0.08	10
AQY221R2M	SON	40	0.25	0.8	14	0.2 / 0.04	10
AQY221R6V	SSOP	30	1	0.18	37.5	0.2 / 0.07	10
AQY221R2V	SSOP	40	0.25	0.75	12.5	0.1 / 0.08	10
AQY221R4V	SSOP	40	0.5	0.55	24	0.25 / 0.08	10
AQY222R2V	SSOP	60	0.4	0.8	27	0.15 / 0.08	10
AQY221R2S	SOP4	40	0.25	0.8	13	0.1 / 0.06	10
AQY222R1S	SOP4	60	0.5	0.8	24.5	0.15 / 0.06	10
AQY225R1S	SOP4	80	0.35	0.8	37.5	0.25 / 0.08	10
AQS221R2S	SOP16	40	0.16	0.8	13	0.15 / 0.06	10
RF Low Count Type							
AQY2C1R3P	TSON	40	0.1	10.5	1.2	0.01 / 0.02	10
AQY2C5R3P	TSON	100	0.12	9.0	5.8	0.03 / 0.04	10
AQY221N5T	VSSOP	20	0.18	2.8	1.1	0.02 / 0.01	10
AQY221N3T	VSSOP	25	0.15	5.5	1.1	0.01 / 0.03	10
AQY221N2T	VSSOP	40	0.12	9.5	1.1	0.01 / 0.03	10
AQY225R3T	VSSOP	100	0.12	8.8	5.8	0.04 / 0.05	10
AQY221N2M	SON	40	0.12	9.5	1.1	0.02 / 0.02	10
AQY221N3M	SON	25	0.15	5.5	1.1	0.02 / 0.02	10
AQY221N5V	SSOP	20	0.18	2.8	1.1	0.02 / 0.01	10
AQY221N3V	SSOP	25	0.15	5.5	1.0	0.02/0.02	10
AQY221N2V	SSOP	40	0.12	9.5	1.0	0.02 / 0.02	10
AQY225R2V	SSOP	80	0.12	10.5	4.5	0.05 / 0.05	10
AQY225R3V	SSOP	100	0.12	8.8	5.8	0.05 / 0.05	10
AQY221N2S	SOP4	40	0.12	9.5	1.0	0.03 / 0.03	10
AQY225R2S	SOP4	80	0.15	10.5	4.5	0.05 / 0.05	10
AQS221N2S	SOP16	40	0.06	9.5	1.0	0.03 / 0.03	10

Part Number	Package	Load Voltage (V)	Load Current (A)	On Resistance Typ (Ω)
HE Type High Current/Voltage				
AQV252G	DIP6	60	2.5	0.08
AQV252G3S	SOP6	60	3.3	0.033
AQV252G3	DIP6	60	3.5	0.033
AQV255G3S	SOP6	100	2.2	0.07
AQV255G3	DIP6	100	2.4	0.07
AQV256H	DIP6	600	0.13	20
AQV259	DIP6	1000	0.03	85
AQV258	DIP6	1500	0.02	345
AQV258H5 (Reinforced)	DIP6	1500	0.02	345
GU/GE Type (1FormA/2FormA)				
AQY2176S	SOP4	200	0.4	1.8
AQY212S/AQY212EH	SOP4/DIP4	60	0.5 / 0.55	0.83 / 0.85
AQY210S/AQY210EH	SOP4/DIP4	350	0.12 / 0.13	17 / 18
AQY214S/AQY214EH	SOP4/DIP4	400	0.1 / 0.12	25 / 26
AQW212S/AQW212EH	SOP8/DIP8	60	0.4 / 0.5	0.83
AQW210S/AQW210EH	SOP8/DIP8	350	0.1 / 0.12	16 / 18
AQW214S/AQW214EH	SOP8/DIP8	400	0.08 / 0.1	30 / 26
GU/GE Type (1FormB)				
AQY412S/AQY412EH	SOP4/DIP4	60	0.5 / 0.55	1
AQY410S/AQY410EH	SOP4/DIP4	350	0.12 / 0.13	18
AQY414S/AQY414EH	SOP4/DIP4	400	0.1 / 0.12	26
GU/GE Type (1FormA And 1FormB)				
AQW612S/AQW612EH	SOP8/DIP8	60	0.45 / 0.5	1
AQW610S/AQW610EH	SOP8/DIP8	3500	0.1 / 0.12	18
AQW614EH	DIP8	400	0.1	26
Power Type				
AQZ202G	SIL4	60	6	0.015
AQZ205G	SIL4	100	4	0.035
AQZ207G	SIL4	200	2	0.18
AQZ206G2	SIL4	600	1	0.52
AQZ192 (DC Only)	SIL4	60	10	0.008
AQZ197 (DC Only)	SIL4	200	5	0.031