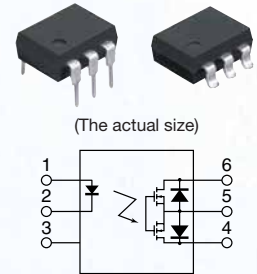




NEW

Compact and Long-life PhotoMOS relays for Frequent switching of 2 to 3A load



PhotoMOS Relays
HE 1 Form A High Capacity

Can replace larger mechanical relays of up to 3.5A

- **High Capacity of load current 3.5A***
PhotoMOS relay DIP type comes to 3.5A. This contributes to make systems smaller and more reliable. Recommended for 12V and 2A to 3A load control.

- **Low on-resistance of typ. 0.035Ω***
- **Offers improved system reliability and life-cycle cost.**
PhotoMOS relays have no moving contact, consume less power and need less PC board.

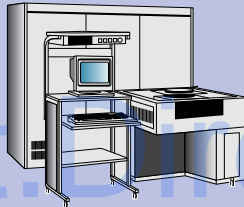
* In case of A connection

Recommended Applications

- Power supply



- Testing equipment



- Replacement of electro-mechanical relays used for purpose of 2 to 3A load control.

TYPES

Packing quantity: Tube packing style: Inner 50 pcs., Outer 500 pcs.
Tape and reel packing style: Inner 1,000 pcs., Outer 1,000 pcs.

	Output rating*		Part No.			
			Through hole terminal		Surface-mount terminal	
	Load voltage	Load current	Tube packing style	Tube packing style	Tape and reel packing style	
					Picked from the 1/2/3-pin side	Picked from the 4/5/6-pin side
AC/DC	30V	3.5A	AQV251G	AQV251GA	AQV251GAX	AQV251GAZ

*Indicate the peak AC and DC values.

HE High capacity type Lineup

(Measurement condition: Ambient temperature 25°C 77°F)

		HE 1 Form A High capacity (6pin)		HE SOP 1 Form A High capacity (6pin)	
		AC/DC		AC/DC	
Appearance configuration *Standoff height included (Unit: mm inch)					
Part No.		AQV251G New	AQV252G	AQV255GS	
Load voltage	Peak AC	30V	60V	80V	
	DC	30V	60V	80V	
Output	Continuous load current (In case of A connection)	3A	2.5A	1.25A	
		2A			
		1A			
	Peak load current	6.0A	6.0A	2.5A	
Power dissipation		500mW	500mW	450mW	
ON resistance (In case of A connection)	Typ.	0.035Ω	0.08Ω	0.09Ω	
	Max.	0.08Ω	0.12Ω	0.15Ω	
Output capacitance (Typ.)		—	240pF	300pF	
Off state leakage current		1μA	1μA	1μA	
Input	LED forward current	50mA	50mA	50mA	
	LED reverse voltage	5V	5V	5V	
	Peak forward current	1A	1A	1A	
	Power dissipation	75mW	75mW	75mW	
	LED operate current [LED operate (OFF) current]	Typ.	0.55mA	0.5mA	0.5mA
		Max.	3mA	3mA	3mA
	LED turn off current [LED reverse (ON) current]	Min.	0.2mA	0.2mA	0.2mA
Typ.		0.45mA	0.45mA	0.4mA	
LED dropout voltage	Typ.	1.25V (1.14V at I _F = 5mA)	1.25V (1.14V at I _F = 5mA)	1.32V (1.14V at I _F = 5mA)	
	Max.	1.5V	1.5V	1.5V	
Turn on time [Operate (OFF) time]	Typ.	1.1ms	1.1ms	1.3ms	
	Max.	5.0ms	5.0ms	5.0ms	
Turn off time [Reverse (ON) time]	Typ.	0.08ms	0.25ms	0.1ms	
	Max.	0.5ms	0.5ms	0.5ms	
Total power dissipation		550mW	550mW	500mW	
I/O isolation voltage		1,500V AC	1,500V AC	1,500V AC	
Operating temperature		-40°C to +85°C -40°F to +185°F	-40°C to +85°C -40°F to +185°F	-40°C to +85°C -40°F to +185°F	
Storage temperature		-40°C to +100°C -40°F to +212°F	-40°C to +100°C -40°F to +212°F	-40°C to +100°C -40°F to +212°F	
Initial I/O isolation resistance (Min.)		1,000MΩ	1,000MΩ	1,000MΩ	
Terminal layout (Unit: mm inch)	Through hole terminal				
	Surface mount terminal				
• Tolerance: ±0.1 ±.004					
Standards		—	UL, C-UL, VDE	UL, C-UL, VDE	
Mass (weight) (approx.)		0.453g .016oz		0.125g .004oz	

PhotoMOS relays lineup includes more products suited for high capacity switching.
Please see our website <http://panasonic-electric-works.net/ac> or inquire with a local sales representative.

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Specifications are subject to change without notice.

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