

PhotoMOS

Type of relay		HE Type			HE LED Display Type		HE Soft-ON/OFF Type			
		1b Type			1a Type		1a Type			
		AC/DC Type			AC/DC Type		AC/DC Type			
		Standard I/O isolation type			Reinforced I/O isolation type					
Features		<ul style="list-style-type: none"> High sensitivity and low on-resistance Normally closed type 			<ul style="list-style-type: none"> Low on resistance and LED display 		<ul style="list-style-type: none"> High sensitive and low on-resistance 			
		Part No.	AQV453	AQV454	AQV454H	AQV254R	AQV257M			
Load voltage*		Peak AC	250 V			400 V		200 V		
		DC	250 V			400 V		200 V		
Output		Continuous load current	0.2 A			0.15 A		0.15 A		
			0.6 A			0.5 A		0.75 A		
		Peak load current	0.6 A			0.5 A		0.75 A		
		Power dissipation*	360 mW			360 mW		360 mW		
		ON resistance	Typical	5.5 Ω			12.4 Ω		2.6 Ω	
			Maximum	8.0 Ω			16 Ω		4 Ω	
		Output capacitance (Typical)	350 pF			170 pF		170 pF		
		Off state leakage current	Max. 1 μA			Max. 10 μA		Max. 1 μA		
Input		LED forward current*	50 mA			25 mA		50 mA		
		LED reverse voltage*	3 V			3 V		3 V		
		Peak forward current	1 A			60 mA		1 A		
		Power dissipation*	75 mW			90 mW		75 mW		
		LED operate current (LED operate (OFF) current)	Typical	1.0 mA			1.4 mA		0.6 mA	
			Maximum	3.0 mA			3 mA		2.0 mA	
		LED turn-off current (LED reverse (ON) current)	Minimum	0.4 mA			0.4 mA		0.2 mA	
Typical	0.9 mA			1.3 mA		0.5 mA				
LED dropout voltage (I _F = 5 mA)	Typical	1.14 V			2.8 V		1.14 V			
	Maximum	1.5 V			3.5 V		1.5 V			
Switching speed		Turn on time (Operate (OFF) time)	Typical	1.52 ms			0.8 ms		5.1 ms (Rise time: typical 2.2 ms)	
			Maximum	3 ms			2 ms		15 ms (Fall time: min. 1.0 ms)	
		Turn off time (Reverse (ON) time)	Typical	0.4 ms			0.05 ms		3.2 ms (Rise time: typical 1.3 ms)	
			Maximum	1 ms			0.2 ms		10 ms (Fall time: 0.6 ms)	
		Total power dissipation*	410 mW			410 mW		410 mW		
		I/O isolation voltage*	1,500 V AC			5,000 V AC		1,500 V AC		
Temperature limits		Operating*	-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*	-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	
		I/O capacitance		1.3 pF			1.3 pF		0.8 pF	
		Initial I/O isolation resistance	Min. 1,000 MΩ			1,000 MΩ		Min. 1,000 MΩ		
Terminal layout (100 .inch grid)		Through hole terminal (Bottom view)			Surface mount terminal recommended mounting pad (Top view)					
		Tolerance: ±0.1 ±0.04			UL (E43149), CSA (LR26550), TÜV, CSA (LR26550), BSI		UL (E43149), CSA (LR26550), TÜV		UL (E43149), CSA (LR26550), TÜV	
Standards										
Mounting method										

*The values are absolute maximum ratings (25°C 77°F). []: Representation in case of Form B type contact PhotoMOS Relay.