

PhotoMOS

7
RELAYS

		HF Type				HE Type															
		1a Type				1a Type															
		AC/DC Type				AC/DC Type															
Type of relay	mm (inch)																				
						Standard I/O isolation type				Reinforced I/O isolation type											
Features		<ul style="list-style-type: none"> Low on-resistance Control with an input current of 10 mA 				<ul style="list-style-type: none"> High sensitivity and low on-resistance 															
		Part No.	AQV201	AQV202	AQV203	AQV204	AQV251	AQV252	AQV255	AQV257	AQV253	AQV254	AQV259	AQV258	AQV253H	AQV254H					
Load voltage*	Peak AC	40 V	60 V	250 V	400 V	40 V	60 V	100 V	200 V	250 V	400 V	1,000 V	1,500 V	250 V	400 V						
	DC	40 V	60 V	250 V	400 V	40 V	60 V	100 V	200 V	250 V	400 V	1,000 V	1,500 V	250 V	400 V						
Output	Continuous load current																				
	Peak load current	1.8 A	1.5 A	0.6 A	0.5 A	1.8 A	1.5 A	1.0 A	0.75 A	0.6 A	0.5 A	0.09 A	0.06 A	0.6 A	0.5 A						
Power dissipation*		360 mW				360 mW															
ON resistance	Typical	0.6 Ω	0.74 Ω	5.5 Ω	12.4 Ω	0.6 Ω	0.74 Ω	1.8 Ω	2.6 Ω	5.5 Ω	12.4 Ω	85 Ω	345 Ω	5.5 Ω	12.4 Ω						
	Maximum	1 Ω	1.4 Ω	8 Ω	16 Ω	1.0 Ω	1.4 Ω	2.5 Ω	4.0 Ω	8.0 Ω	16 Ω	200 Ω	500 Ω	8 Ω	16 Ω						
Output capacitance (Typical)		350 pF				350 pF				170 pF				80 pF				170 pF			
Off state leakage current		Max. 1 μA				Max. 1 μA				Max. 10 μA				Max. 1 μA							
Input	LED forward current*	50 mA				50 mA															
	LED reverse voltage*	6 V				3 V															
	Peak forward current	1 A				1 A															
	Power dissipation*	150 mW				75 mW															
	LED operate current (LED operate (OFF) current)	Typical	2.4 mA				0.9 mA				1.4 mA										
	Maximum	5 mA				3.0 mA				3.0 mA											
LED turn off current (LED reverse (ON) current)	Minimum	0.8 mA				0.4 mA				0.4 mA											
Typical	2.2 mA				0.8 mA				1.3 mA												
LED dropout voltage (I _f = 5 mA)	Typical	2.3 V				1.14 V															
Maximum	3 V				1.5 V																
Switching speed	Turn on time (Operate (OFF) time)	Typical	0.38 ms	0.41 ms	0.21 ms	0.18 ms	1.7 ms	1.4 ms	0.9 ms	1.5 ms	0.8 ms	0.6 ms	0.35 ms	2.4 ms	1.8 ms						
	Maximum	1 ms				3.0 ms				3.0 ms				4 ms							
Total power dissipation*	Turn off time (Reverse (ON) time)	Typical	0.08 ms	0.08 ms	0.07 ms	0.07 ms	0.07 ms	0.09 ms	0.1 ms	0.06 ms	0.05 ms	0.04 ms	0.04 ms	0.06 ms	0.05 ms						
	Maximum	1 ms				0.2 ms				0.2 ms				0.2 ms							
I/O isolation voltage*		1,500 V AC				1,500 V AC				5,000 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															
	Storage*	-40°C to +100°C -40°F to +212°F				-40°C to +100°C -40°F to +212°F															
I/O capacitance	Typical	1.3 pF				1.3 pF															
Maximum	3 pF				3 pF																
Initial I/O isolation resistance		Min. 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)																
Standards		UL (E43149), CSA (LR26550), TÜV				UL (E43149), CSA (LR26550), TÜV								UL (E43149), CSA (LR26550), TÜV, BSI, VDE							
Mounting method																					

Note: Meaning of symbol marks : PC board terminal; : Surface-mounting