

PhotoMOS

7
RELAYS

		RF Low C and R Type		RF Low on resistance Type			HS Type
		1a Type		1a Type		2a Type	1a Type
		AC/DC Type		AC/DC Type		AC/DC Type	AC/DC Type
* Type of relay							
* Features		• Low output capacitance between output terminals and low ON-resistance		• Low on-resistance type for high frequency application		• 2-channel type of low on-resistance type	• Highest sensitivity LED operate current: typical 0.31 mA
		Part No.		AQV221N AQV225N AQV227N AQV224N AQW225N AQW227N AQW224N			AQV234
Load voltage*		Peak AC		40 V 80 V 200 V 400 V 80 V 200 V 400 V			400 V
		DC		40 V 80 V 200 V 400 V 80 V 200 V 400 V			400 V
Continuous load current		6 A					
		1 A					
* Output		0.15 A		0.15 A 0.07 A 0.05 A		0.12 A 0.05 A 0.04 A	0.12 A
Peak load current		0.45 A		0.45 A 0.21 A 0.15 A		0.36 A 0.15 A 0.12 A	0.3 A
Power dissipation*		360 mW		360 mW		800 mW	500 mW
ON resistance		Typical 9.8 Ω Maximum 15 Ω		7 Ω 30 Ω 70 Ω 10 Ω 50 Ω 100 Ω		7 Ω 30 Ω 70 Ω 10 Ω 50 Ω 100 Ω	30 Ω 50 Ω
Output capacitance (Typical)		3.9 pF		10 pF		10 pF	45 pF
Off state leakage current		Max. 10 nA		Max. 10 nA		Max. 10 nA	Max. 1 μA
* Input		LED forward current*		50 mA 50 mA 50 mA			50 mA
		LED reverse voltage*		3 V 3 V 3 V			3 V
		Peak forward current		1 A 1 A 1 A			1 A
		Power dissipation*		75 mW 75 mW 75 mW			75 mW
		LED operate current (LED operate (OFF) current)		Typical 0.9 mA Maximum 3 mA			0.31 mA 0.5 mA
		LED turn off current (LED reverse (ON) current)		Minimum 0.4 mA Typical 0.85 mA			0.4 mA 0.8 mA
		LED dropout voltage (I _L = 5 mA)		Typical 1.14 V Maximum 1.5 V			1.1 V 1.5 V
* Switching speed		Turn on time (Operate (OFF) time)		Typical 0.2 ms Maximum 0.5 ms			0.89 ms 2 ms
		Turn off time (Reverse (ON) time)		Typical 0.08 ms Maximum 0.2 ms			0.22 ms 1 ms
* Total power dissipation*		410 mW		410 mW		850 mW	550 mW
* I/O isolation voltage*		1,500 V AC		1,500 V AC		1,500 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
		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 0.8 pF Maximum 1.5 pF		0.8 pF 1.5 pF		0.8 pF 1.5 pF	0.8 pF 1.5 pF
* Initial I/O isolation resistance		Min. 1,000 MΩ		Min. 1,000 MΩ		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)		Through hole terminal (Bottom view)	Surface mount terminal recommended mounting pad (Top view)
		Tolerance: ±0.1 ±.004		Tolerance: ±0.1 ±.004		Tolerance: ±0.1 ±.004	Tolerance: ±0.1 ±.004
* Standards		UL (E43149), CSA (LR26550)		UL (E43149), CSA (LR26550), TÜV		UL (E43149), CSA (LR26550), TÜV	UL (E43149), CSA (LR26550), TÜV
* Mounting method							

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