

PhotoMOS

7
RELAYS

			Power PhotoMOS voltage-sensitive Type								
			1a Type								
			AC/DC Type				DC Type				
• Type of relay											
mm inch											
• Features			• Low on-resistance • Control with an input current of 10 mA								
			Part No.	AQZ202D	AQZ205D	AQZ207D	AQZ204D	AQZ102D	AQZ105D	AQZ107D	AQZ104D
• Load voltage*	Peak AC		60 V	100 V	200 V	400 V	—	—	—	—	—
	DC		60 V	100 V	200 V	400 V	60 V	100 V	200 V	400 V	
	Continuous load current										
	Peak load current		9.0 A	6.0 A	3.0 A	1.5 A	9.0 A	6.0 A	3.0 A	1.5 A	
	Power dissipation*		1.6 W				1.35 W				
	ON resistance	Typical	0.066 Ω	0.180 Ω	0.64 Ω	2.4 Ω	0.033 Ω	0.090 Ω	0.33 Ω	1.23 Ω	
		Maximum	0.18 Ω	0.34 Ω	1.1 Ω	3.2 Ω	0.09 Ω	0.17 Ω	0.55 Ω	1.6 Ω	
	Output capacitance (Typical)		1,400 pF		600 pF		1,700 pF		900 pF		
	Off state leakage current		10 μA				10 μA				
	• Input	Input voltage		30 V				30 V			
Input reverse voltage		3 V				3 V					
Peak forward current		—				—					
Power dissipation*		300 mW				300 mW					
Operate voltage		Typical	1.4 V				1.4 V				
		Maximum	4 V				4 V				
Turn off voltage		Minimum	0.8 V				0.8 V				
		Typical	1.3 V				1.3 V				
Input current		6.5 mA				6.5 mA					
• Switching speed	Turn on time (Operate (OFF) time)	Typical	5.8 ms	4.2 ms	2.7 ms	2.3 ms	3.3 ms	2.2 ms	1.5 ms	1.2 ms	
		Maximum	10.0 ms	10.0 ms	10.0 ms	10.0 ms	10.0 ms	10.0 ms	10.0 ms	10.0 ms	
	Turn off time (Reverse (ON) time)	Typical	0.2 ms	0.2 ms	0.1 ms	0.1 ms	0.2 ms	0.2 ms	0.1 ms	0.1 ms	
		Maximum	3.0 ms	3.0 ms	3.0 ms	3.0 ms	3.0 ms	3.0 ms	3.0 ms	3.0 ms	
• Total power dissipation*			1.6 W				1.35 W				
• I/O isolation voltage*			2,500 V AC				2,500 V AC				
• Temperature limits	Operating*		-40°C to +85°C -40°F to +185°F (4 V≤V _{IN} ≤6 V) -40°C to +75°C -40°F to +167°F (6 V<V _{IN} ≤15 V) -40°C to +60°C -40°F to +140°F (15 V<V _{IN} ≤30 V)				-40°C to +85°C -40°F to +185°F (4 V≤V _{IN} ≤6 V) -40°C to +75°C -40°F to +167°F (6 V<V _{IN} ≤15 V) -40°C to +60°C -40°F to +140°F (15 V<V _{IN} ≤30 V)				
	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 Maximum	0.8 pF 1.5 pF				0.8 pF 1.5 pF				
• Initial I/O isolation resistance			1,000 MΩ				1,000 MΩ				
• Terminal layout (100, inch grid)											
mm inch			Tolerance: ±0.1 ±.004								
• Standards			UL (E43149), CSA (LR26550), TÜV								
• Mounting method											

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