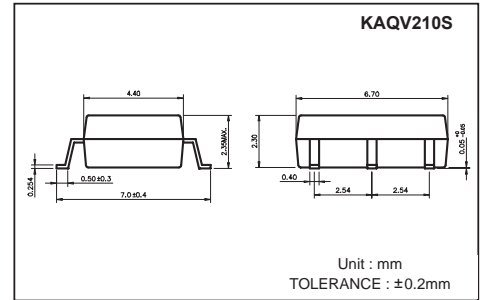


High Voltage, Photo Mos Relay KAQV210S

UL 1577/ UL 508 (File No.E108430), FI EN60950 (File No.FI13698)

Features

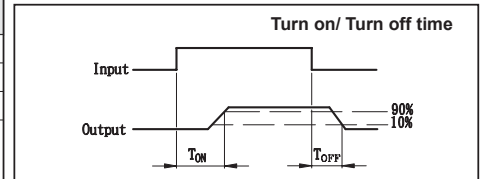
1. Normally Open, Single Pole Single Throw
2. Control 350VAC or DC Voltage
3. Switch 130mA Loads
4. LED control Current, 5mA
5. Low ON-Resistance
6. dv/dt , >500V/ms
7. Isolation Test Voltage, 1500VACrms



Absolute Maximum Ratings

(Ta=25°C)

Emitter (Input)		Detector (Output)	
Reverse Voltage.....	5.0V	Output Breakdown Voltage	±350V
Continuous Forward Current	50mA	Continuous Load Current	±130mA
Peak Forward Current	1A	Power Dissipation	500mW
Power Dissipation	100mW		
Derate Linearly from 25°C	1.3mW/°C		
General Characteristics			
Isolation Test Voltage.....	1500VACrms	Storage Temperature Range	-40°C to +125°C
Isolation Resistance		Operating Temperature Range....	-30°C to +85°C
Vio=500V, Ta=25°C	≥10 ¹⁰ Ω	Junction Temperature.....	100°C
Total Power Dissipation	550mW	Soldering Temperature,	
Derate Linearly from 25°C	2.5mW/°C	2mm from case, 10 sec	260°C



Electro-optical Characteristics

(Ta=25°C)

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit	
Emitter (Input)							
Forward Voltage	V _F	I _F = 10mA		1.2	1.5	V	
Operation Input Current	I _{FON}	V _L = ±20V, I _L = 100mA, t = 10ms			5	mA	
Recovery Input Current	I _{FOFF}	V _L = ±20V, I _L ≤ 5μA	0.2			mA	
Detector (Output)							
Output Breakdown Voltage	V _B	I _B = 50μA	350			V	
Output Off-State Leakage	I _{TOFF}	V _T = 100V, I _F = 0mA		0.2	1	μA	
I/O Capacitance	C _{ISO}	I _F = 0, f = 1MHz		6		pF	
ON Resistance	Connection	A	R _{ON}	I _L = 100mA, I _F = 10mA	20	30	Ω
		B			10	15	
		C			5	7.5	
Turn-On Time	T _{ON}	I _F = 10mA, V _L = ±20V		0.3	1.0	ms	
Turn-Off Time	T _{OFF}	t = 10ms, I _L = ±100mA		0.7	1.5	ms	

Mos Relay Schematic and Wiring Diagrams

Type	Schematic	Output configuration	Load	Connection	Wiring Diagrams
KAQV210S		1a	AC/DC	A	
			DC	B	
			DC	C	

Data Curve

