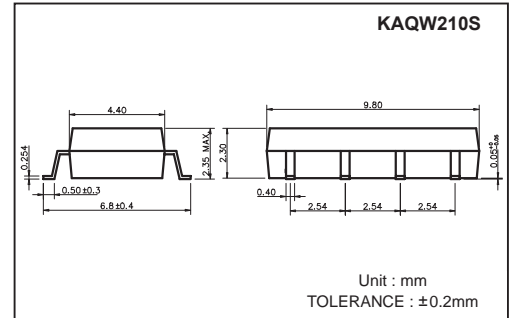


Features

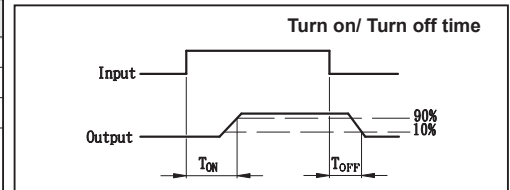
1. Normally Open, Single Pole Single Throw
2. Control 350VAC or DC Voltage
3. Switch 130mA Loads
4. LED control Current, 5mA
5. Low ON-Resistance
6. dv/dt, >500V/ms
7. Isolation Test Voltage, 1500VACrms



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 ≤ 5uA | 0.2 | | | mA |
| Detector (Output) | | | | | | |
| Output Breakdown Voltage | V _B | I _B = 50uA | 350 | | | V |
| Output Off-State Leakage | I _{TOFF} | V _T = 100V, I _F = 0mA | | 0.2 | 1 | uA |
| I/O Capacitance | C _{ISO} | I _F = 0, f = 1MHz | | 6 | | pF |
| ON Resistance | R _{ON} | I _L = 100mA, I _F = 10mA | | 20 | 25 | Ω |
| Reverse (ON) Time | T _{ON} | I _F = 10mA, V _L = ±20V | | 0.3 | 1.0 | ms |
| Operate (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 |
|----------|-----------|----------------------|-------|------------|---|
| KAQW210S | | 2a | AC/DC | - | <p>(1) Two independent 1 Form A use</p> <p>(2) 2 Form A use</p> |

cosmo

KAQW210S

Data Curve

