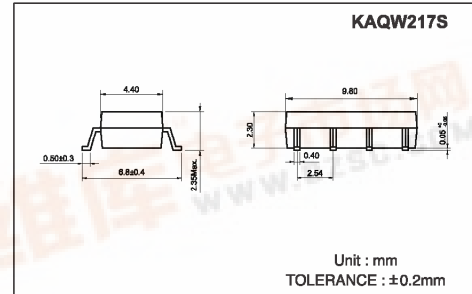


COSMO High Voltage, Solid State Relay-MOSFET Output KAQW217S

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

Features

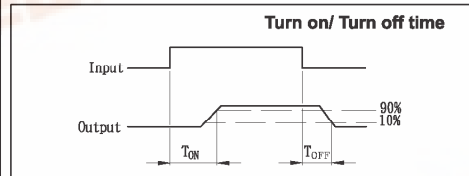
1. Normally Open, Single Pole Single Throw
2. Control 200VAC or DC Voltage
3. Switch 180mA Loads
4. LED control Current, 5mA
5. Low ON-Resistance
6. dv/dt , >500V/ms
7. Isolation Test Voltage, 1500VACrms



Absolute Maximum Ratings

(Ta=25°C)

Emitter (Input)	Detector (Output)
Reverse Voltage5.0V	Output Breakdown Voltage±200V
Continuous Forward Current50mA	Continuous Load Current±180mA
Peak Forward Current1A	Power Dissipation450mW
Power Dissipation75mW	
Derate Linearly from 25°C1.3mW/°C	
General Characteristics	
Isolation Test Voltage1500VACrms	Storage Temperature Range ...-40°C to +150°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 Dissipation500mW	Soldering Temperature,
Derate Linearly from 25°C2.5mW/°C	2mm from case, 10 sec260°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		1.5	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	200			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		6	15	Ω
Turn-On Time	T _{ON}	I _F = 10mA, V _L = ±20V		0.4	1.0	ms
Turn-Off Time	T _{OFF}	t = 10ms, I _L = ±100mA		0.3	1.0	ms

Schematic and Wiring Diagrams

Type	Schematic	Output configuration	Load	Connection	Wiring Diagrams
KAQW217S		2a	AC/DC	-	<p>(1) Two independent 1 Form A use</p> <p>(2) 2 Form A use</p>

Data Curve

