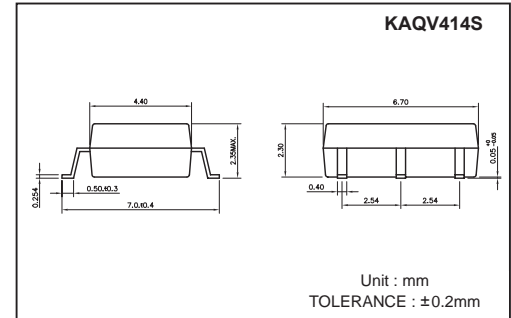


## Features

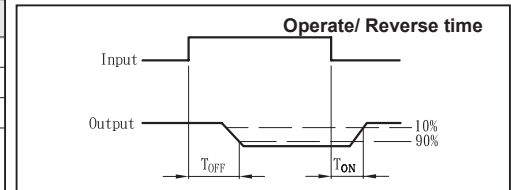
1. Normally Close, Single Pole Single Throw
2. Control 400VAC or DC Voltage
3. Switch 130mA Loads
4. LED control Current, 5mA
5. Low ON-Resistance
6.  $dv/dt$ , >500V/ms
7. Isolation Test Voltage, 1500VACrms



## Absolute Maximum Ratings

( $T_a=25^\circ\text{C}$ )

Emitter ( Input )		Detector ( Output )	
Reverse Voltage.....	5.0V	Output Breakdown Voltage .....	±400V
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
$V_{io}=500\text{V}$ , $T_a=25^\circ\text{C}$ .....	$\geq 10^{10}\Omega$	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

( $T_a=25^\circ\text{C}$ )

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit
Emitter (Input)						
Forward Voltage	$V_F$	$I_F = 10\text{mA}$		1.2	1.5	V
Operation Input Current	$I_{FOFF}$	$V_L = \pm 20\text{V}$ , $I_L \leq 5\mu\text{A}$			5	mA
Recovery Input Current	$I_{FON}$	$V_L = \pm 20\text{V}$ , $I_L = 100\text{mA}$ , $t = 10\text{ms}$	0.2			mA
Detector (Output)						
Output Breakdown Voltage	$V_B$	$I_B = 50\mu\text{A}$	400			V
Output Off-State Leakage	$I_{TOFF}$	$V_T = 100\text{V}$ , $I_F = 0\text{mA}$		0.2	2	$\mu\text{A}$
I/O Capacitance	$C_{ISO}$	$I_F = 0$ , $f = 1\text{MHz}$		6		pF
ON Resistance	Connection	A	$I_L = 100\text{mA}$ , $I_F = 10\text{mA}$	40	50	$\Omega$
		B		20	25	
		C		10	12.5	
Reverse (NO) Time	$T_{ON}$	$I_F = 10\text{mA}$ , $V_L = \pm 20\text{V}$		0.6	1.5	ms
Operate (OFF) Time	$T_{OFF}$	$t = 10\text{ms}$ , $I_L = \pm 100\text{mA}$		0.3	1.0	ms

## Mos Relay Schematic and Wiring Diagrams

Type	Schematic	Output configuration	Load	Connection	Wiring Diagrams
KAQV414S		1a	AC/DC	A	
			DC	B	
			DC	C	

## Data Curve

