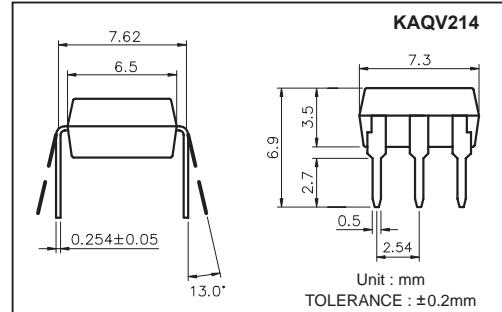


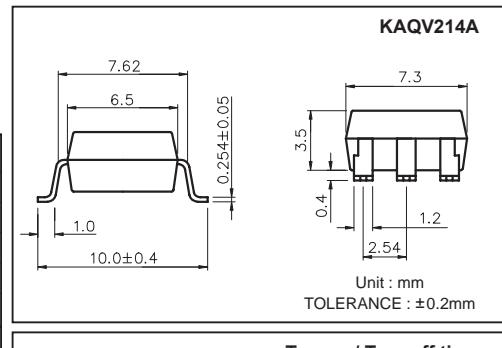
## Features

1. Normally Open, 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, 3750VACrms



## Absolute Maximum Ratings

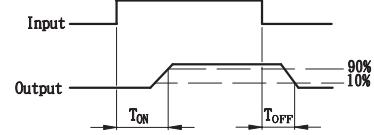
		(Ta=25°C)
Emitter ( Input )	Detector ( Output )	
Reverse Voltage.....	5.0V	Output Breakdown Voltage .....±400V
Continuous Forward Current .....	50mA	Continuous Load Current .....±130mA
Peak Forward Current .....	1A	Power Dissipation .....500mW
Power Dissipation .....	100mW	
Derate Linearly from 25°C .....	1.3mW/°C	
General Characteristics		
Isolation Test Voltage.....	3750VACrms	Storage Temperature Range ...-40°C to +125°C
Isolation Resistance		Operating Temperature Range...-30°C to +85°C
Vio=500V, Ta=25°C .....	≥10 <sup>10</sup> 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



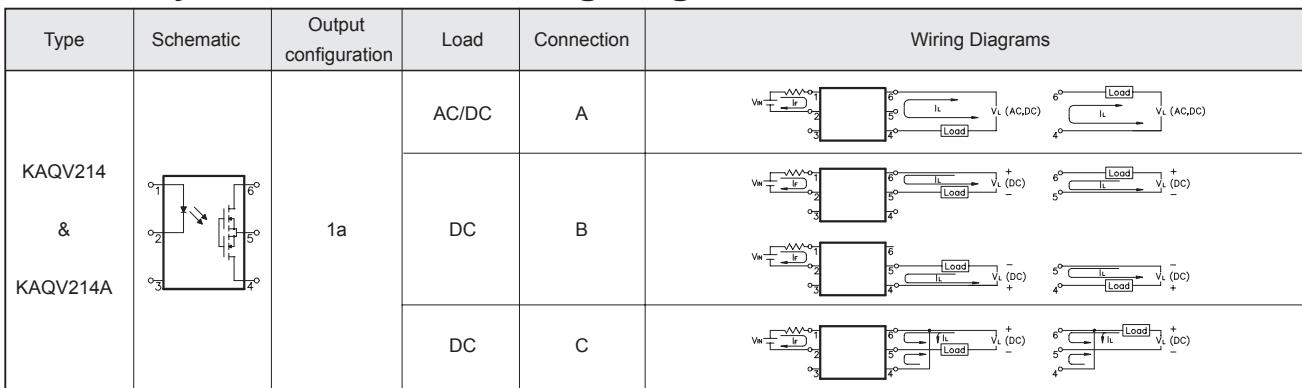
## Electro-optical Characteristics

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit		
Emitter (Input)								
Forward Voltage	V <sub>F</sub>	I <sub>F</sub> =10mA		1.2	1.5	V		
Operation Input Current	I <sub>IFON</sub>	V <sub>L</sub> =±20V, I <sub>L</sub> =100mA, t=10mS			5	mA		
Recovery Input Current	I <sub>IOFF</sub>	V <sub>L</sub> =±20V, I <sub>L</sub> ≤5μA	0.2			mA		
Detector (Output)								
Output Breakdown Voltage	V <sub>B</sub>	I <sub>B</sub> =50μA	400			V		
Output Off-State Leakage	I <sub>TOFF</sub>	V <sub>T</sub> =100V, I <sub>F</sub> =0mA	0.2	1		uA		
I/O Capacitance	C <sub>I/O</sub>	I <sub>F</sub> =0, f=1MHz	6			pF		
ON Resistance	Connection	A B C	I <sub>L</sub> =100mA, I <sub>F</sub> =10mA	20	30	Ω		
				10	15			
				5	7.5			
Turn-On Time			I <sub>F</sub> =10mA, V <sub>L</sub> =±20V	0.3	1.0	ms		
Turn-Off Time			t=10ms, I <sub>L</sub> =±100mA	0.7	1.5	ms		

Turn on/ Turn off time

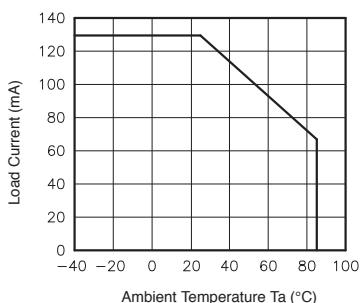


## Mos Relay Schematic and Wiring Diagrams

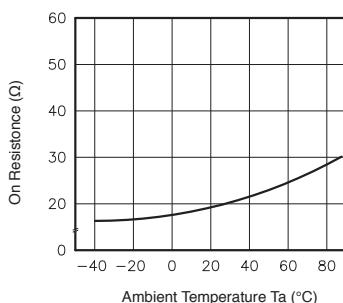


## Data Curve

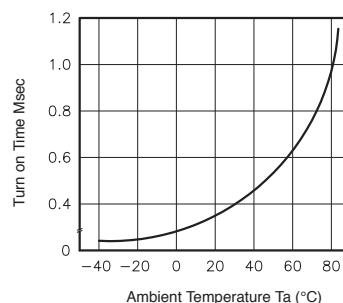
**Fig.1** Load current vs. ambient temperature  
Allowable ambient temperature:  
-40°C to +85°C



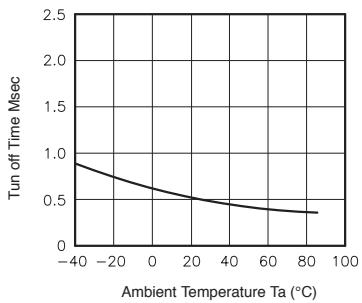
**Fig.2** On resistance vs. ambient temperature  
Across terminals 4 and 6 pin  
LED current: 5mA  
Continuous load current: 130mA(DC)



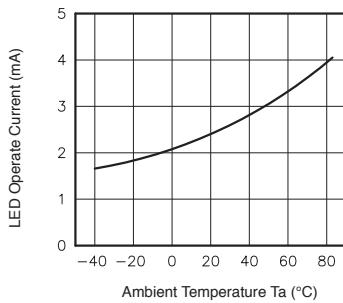
**Fig.3** Turn on time vs. ambient temperature  
Load voltage 400V(DC)  
LED current: 5mA  
Continuous load current: 130mA(DC)



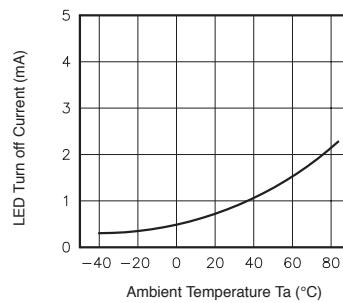
**Fig.4** Turn off time vs. ambient temperature  
LED current: 5mA; Load voltage:  
400V(DC)  
Continuous load current: 130mA(DC)



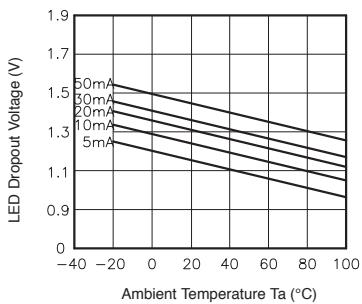
**Fig.5** LED operate vs. ambient temperature  
Load voltage 400V(DC)  
Continuous load current: 130mA(DC)



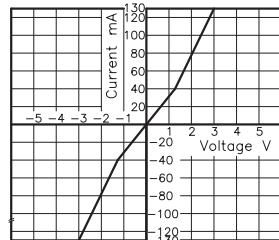
**Fig.6** LED turn off current vs. ambient temperature  
Load voltage 400V(DC)  
Continuous load current: 130mA(DC)



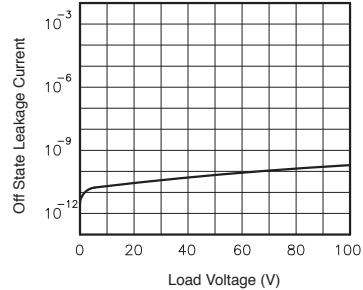
**Fig.7** LED dropout voltage vs. ambient temperature  
LED current: 5 to 50mA



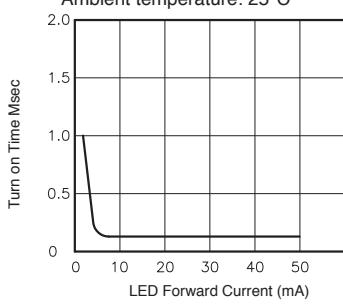
**Fig.8** Voltage vs. current characteristics of output at MOS FET portion  
Measured portion: across terminals 4 and 6 pin  
Ambient temperature: 25°C



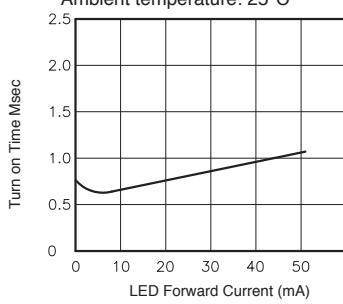
**Fig.9** Off state leakage current  
Across terminals 4 and 6 pin  
Ambient temperature: 25°C



**Fig.10** LED forward current vs. turn on time  
Across terminals 4 and 6 pin;  
Load voltage: 400V (DC);  
Continuous load current: 130mA (DC);  
Ambient temperature: 25°C



**Fig.11** LED forward current vs. turn off time  
Across terminals 4 and 6 pin;  
Load voltage: 400V (DC);  
Continuous load current: 130mA (DC);  
Ambient temperature: 25°C



**Fig.12** Applied voltage vs. output capacitance  
Across terminals 4 and 6 pin  
Frequency: 1MHz  
Ambient temperature: 25°C

