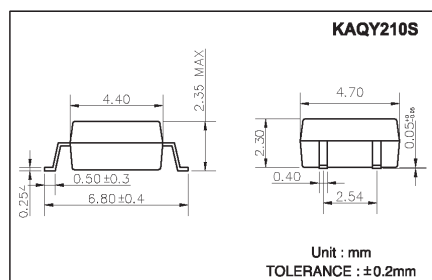


Features

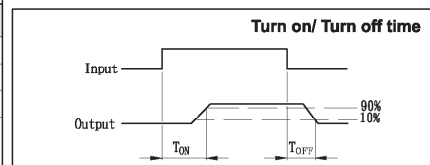
1. Normally Open, Single Pole Single Throw
2. Control 350VAC or DC Voltage
3. Switch 130mA Loads
4. LED control Current, 5mA
5. Low ON-Resistance
6. dv/dt , >500V/ms
7. Isolation Test Voltage, 1500VACrms



Absolute Maximum Ratings

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

Emitter (Input)	Detector (Output)
Reverse Voltage.....5.0V	Output Breakdown Voltage $\pm 350\text{V}$
Continuous Forward Current50mA	Continuous Load Current $\pm 130\text{mA}$
Peak Forward Current1A	Power Dissipation 500mW
Power Dissipation100mW	
Derate Linearly from 25°C1.3mW/°C	
General Characteristics	
Isolation Test Voltage1500VACrms	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 Dissipation550mW	Soldering Temperature,
Derate Linearly from 25°C2.5mW/°C	2mm from case, 10 sec260°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_{FON}	$V_L=\pm 20\text{V}, I_L=100\text{mA}, t=10\text{ms}$			5	mA
Recovery Input Current	I_{FOFF}	$V_L=\pm 20\text{V}, I_L=5\mu\text{A}$	0.2			mA
Detector (Output)						
Output Breakdown Voltage	V_B	$I_B=50\mu\text{A}$	350			V
Output Off-State Leakage	I_{TOFF}	$V_T=100\text{V}, I_F=0\text{mA}$		0.2	1	μA
I/O Capacitance	C_{ISO}	$I_F=0, f=1\text{MHz}$		6		pF
ON Resistance	R_{ON}	$I_L=100\text{mA}, I_F=10\text{mA}$		20	30	Ω
Turn-On Time	T_{ON}	$I_F=10\text{mA}, V_L=\pm 20\text{V}$		0.3	1.0	ms
Turn-Off Time	T_{OFF}	$t=10\text{ms}, I_L=\pm 100\text{mA}$		0.7	1.5	ms

Schematic and Wiring Diagrams

Type	Schematic	Output configuration	Load	Connection	Wiring Diagrams
KAQY210S		1a	AC/DC	-	

Data Curve

