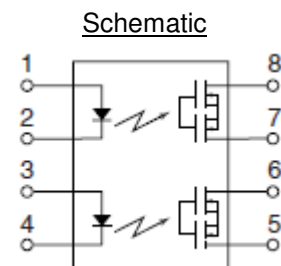
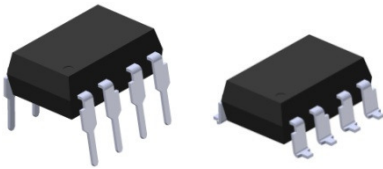


GENERAL PURPOSE SOLID STATE RELAY 8PIN DIP 2-CHANNEL TYPE FORM A SSR



Pin Configuration

- 1, 3 LED Anode
- 2, 4 LED Cathode
- 8, 7, 6, 5 MOSFET

Features

- Compact 8-pin DIP size
- Applicable for 2 Form A use as well as two independent 1Form A use
- Controls low-level analog signals
- High sensitivity and high speed response
- Low-level off state leakage current of max. 1uA
- Wide operating temperature range of -40°C to 85°C
- High isolation voltage between input and output (Viso = 5000 Vrms)
- UL 1577 + cUL approved (No. E214129)
- UL 508 + cUL approved (No. E348721)
- VDE approved (No. 40028391)
- SEMKO approved
- NEMKO approved
- DEMKO approved
- FIMKO approved
- CQC approved

Description

The EL840A and EL860A are solid state relays containing an AlGaAs infrared LEDs on the light emitting side (input side) optically coupled to a high voltage output detector circuit. The detector consists of a photovoltaic diode array and MOSFETs on the output side. The dual channel configuration is equivalent to 1 form A EMR. They are packaged in 8 pin DIP and available in surface mount SMD option.

Applications

- High-speed inspection machines
- Telephones equipment
- Computer

Absolute Maximum Ratings ($T_A=25^{\circ}\text{C}$, unless otherwise specified)

Parameter	Symbol	Rating		Unit	
		EL840A	EL860A		
Input	Forward Current	I_F	50	mA	
	Reverse Voltage	V_R	5	V	
	Peak Forward Current* ¹	I_{FP}	1	A	
	Power Dissipation	P_{in}	75	mW	
Output	Break Down Voltage	V_L	400	600	V
	Continuous Load Current	I_L	120	50	mA
	Pulse Load Current* ²	I_{LPeak}	0.3	0.15	A
	Power Dissipation	P_{out}	800		mW
Total Power Dissipation	P_T	850		mW	
Isolation Voltage* ³	V_{iso}	5000		Vrms	
Storage Temperature	T_{STG}	-40 to 125		$^{\circ}\text{C}$	
Operating Temperature	T_{OPR}	-40 to 85		$^{\circ}\text{C}$	
Soldering Temperature* ⁴	T_{SOL}	260		$^{\circ}\text{C}$	

Notes:

*1. $f = 100\text{Hz}$, Duty Cycle = 0.1%

*2. A connection: 100ms (1 shot), $V_L = \text{DC}$

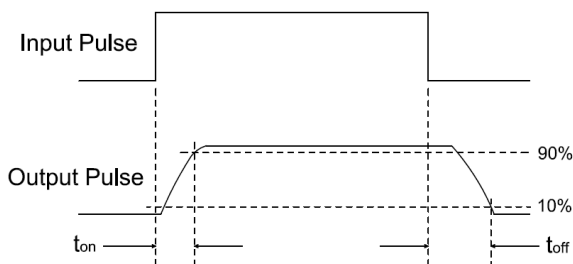
*3. AC for 1 minute, R.H. = 40 ~ 60% R.H. In this test, pins 1, 2 are shorted together, and pins 3, 4 are shorted together.

*4. For 10 seconds

Electro-Optical Characteristics ($T_A=25^{\circ}\text{C}$)

	Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
Input	Forward Voltage	V_F	$I_F = 10\text{mA}$	-	1.18	1.5	V
	Reverse Current	I_R	$V_R = 5\text{V}$	-	-	1	μA
Output	Off State leakage Current	I_{leak}	$I_F = 0\text{mA}, V_L = \text{Max.}$	-	-	1	μA
	On Resistance	$R_{d(\text{ON})}$	$I_F = 10\text{mA}, I_L = \text{Max.}$ $t = 1\text{s}$	-	20	30	Ω
				-	40	70	
	Output Capacitance	C_{out}	$V_L = 0\text{V}, f = 1\text{MHz}$	-	45	-	pF
-				30	-		
Transfer Characteristics	LED turn on Current	$I_{F(\text{on})}$	$I_L = \text{Max.}$	-	3.0	5	mA
				-	3.0	5	
	LED turn off current	$I_{F(\text{off})}$	$I_L = \text{Max.}$	0.4	3.0	-	mA
				0.4	3.0	-	
	Turn On Time	T_{on}	$I_F = 10\text{mA}, I_L = \text{Max.}$ $R_L = 200\Omega,$	-	0.4	3	ms
				-	1.4	3	
	Turn Off Time	T_{off}	$I_F = 10\text{mA}, I_L = \text{Max.}$ $R_L = 200\Omega,$	-	0.05	0.5	ms
				-	0.05	0.5	
Isolation Resistance	R_{I-O}	$V_{I-O} = 500\text{V DC}$	5×10^{10}	-	-	Ω	
Isolation Capacitance	C_{I-O}	$V = 0\text{V}, f = 1\text{MHz}$	1.5	-	-	pF	

Turn on/Turn off Time



ERROR: stackunderflow
OFFENDING COMMAND: ~

STACK: