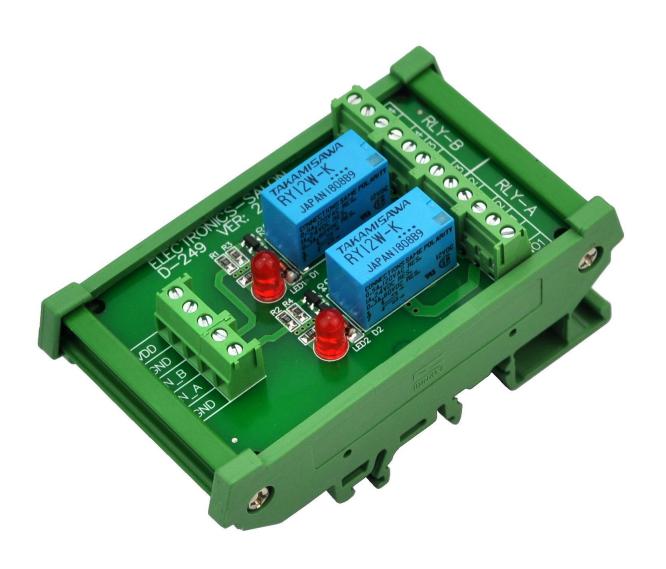
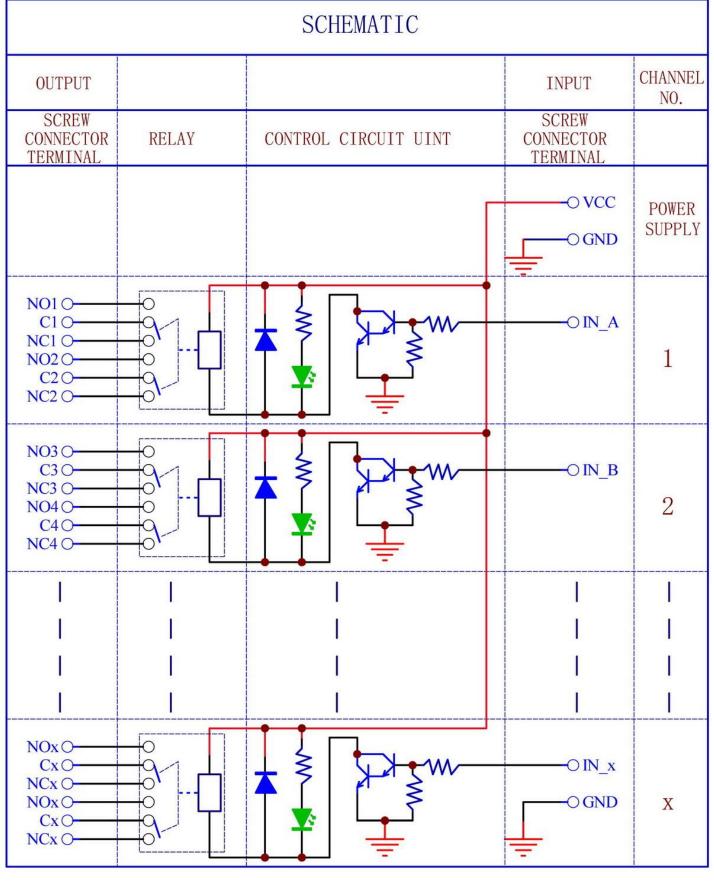
# CZH-LABS Electronics-Salon

2 DPDT Signal Relay Module Model: D-249 Series, Version 2.0

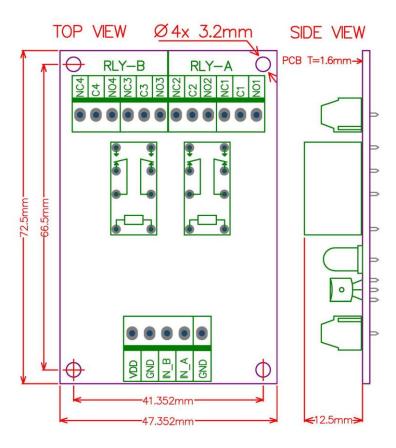


# Schematic: SCHEMATIC

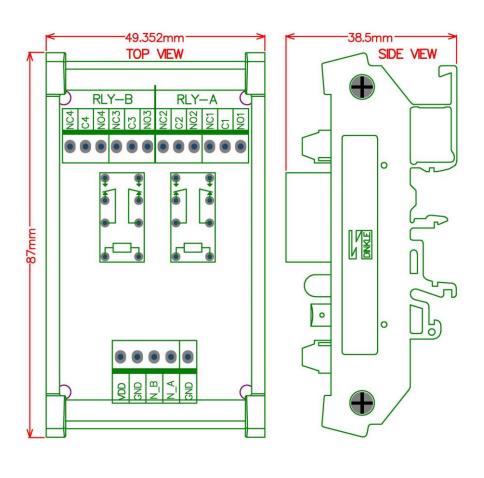


## **Dimensions:**

# **Panel mount**



**DIN** rail mount



### Feature:

- 2 DPDT signal relay module. Japan TAKAMISAWA RY series relay, switch contact material: gold overlay silver-palladium.
- LED indicator for each relay channel, darlington transistor drive relay coil.
- High quality screw terminal block.
- FR-4 fiber glass PCB, dual copper layers.
- Panel mount or DIN rail mount versions are available. Taiwan DINKLE fireproof nylon material DIN rail mount carrier (not China low quality carrier), can support width 35mm / 32mm / 15mm rail, and the carrier can be taken apart for panel mount use.

### **Version List:**

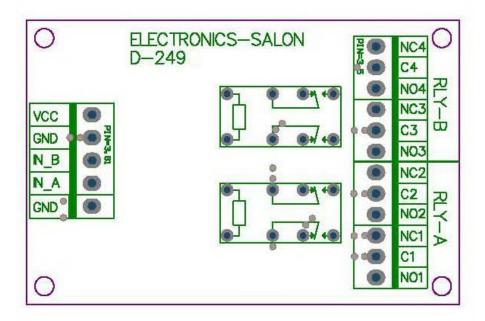
Part Number	Mount Type	Standard Operating Voltage	
MD-D249/5V-1	Panel mount	5V DC	
MD-D249T/5V-1	DIN rail mount		
MD-D249/12V-1	Panel mount	12V DC	
MD-D249T/12V-1	DIN rail mount		
MD-D249/24V-1	Panel mount	24V DC	
MD-D249T/24V-1	DIN rail mount		

### **Characteristic Parameters:**

Operating voltage			
Voltage version	5V	12V	24V
Relay type	RY5W-K	RY12W-K	RY24W-K
Operating voltage range	3.6~6.5VDC	8.5~15.6VDC	16.8~31.2VDC
Operating current (all relay action)	100mA	60mA	40mA
Operating current (all relay no action)	0mA		
Control signal input			
Low level (Relay no action)	0V ~ 0.5V		
High level (Relay action)	2.5V ~ 24V		
High level current	0.1mA@2.5V		
	0.4mA@5V		
	1.1mA@12V		
	2.2mA@24V		
Output (relay switch) contact rating			
For AC	120VAC, 0.5Amp		
For DC	24VDC, 1Amp		

Other data		
Capacitance (at 10MHz)	Approximately 0.9 pF (open contacts), 1.4pF (adjacent	
	contacts)	
	Approximately 1.9 pF (between coil and contacts)	
Life	Mechanical:	
	Min. 20 x 10 <sup>6</sup> operations	
	Electrical (at contact rating):	
	Min. 200 x 10 <sup>3</sup> operations (0.5A, 120VAC)	
	Min. 500 x 10 <sup>3</sup> operations (1A, 24VDC)	

### **Wire Connect:**



VCC: Operating power supply input (V+). GND: Operating power supply 0V(ground)

GND: Control signal input 0V(ground).

IN\_n: Control signal input.

NOx: Relay switch normally open terminal. NCx: Relay switch normally close terminal.

Cx: Relay switch common terminal.

### **Terminal Block:**

Pitch 3.81mm/0.15" screw terminal block.

Wire range 26AWG ~ 16AWG / 1mm<sup>2</sup>

Strip length 5mm.

Screws – M2,steel,Cr3+ Zn plated.

Pin header and Cage - Brass.

http://www.electronics-salon.com lisheng@chunzehui.com