

# *GIN SERIES*

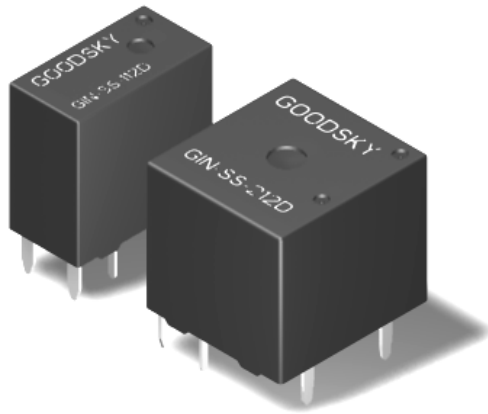
## For Automotive

**Application** Control Board on Power Window / ABS / Transmission / Central Locking System; etc.

**Features** Slim Size 14.2×7.3×13.6mm with High Rating High Current 30A

**RoHS Compliant**





## Main Feature

1. 25Amp motor lock load.
2. Small size with high rating.
3. Single or dual version available.
4. Standard type contact form SPDT and SPST are available for customers' selection
5. High performance PCB Relay.
6. Applications Power Windows Seat adjustment Power Doors Sunroof Wiper Control.

## Contact Rating

Load Type	GIN (DM)	GIN (D)
Rated Load (Resistive)	30A 14VDC	25A 16VDC
Rated Carrying Current	30A	25A
Max. Allowable Voltage	DC 14V	DC 16V
Max. Allowable Current	30A	25A
Max. Allowable Power Force	420W	400W
Contact Material	Ag Alloy	Ag Alloy
Contact Form	SPST	SPDT

## Application

For direct connection with Cell Motors, Transmission etc. and Anti-Locking Brake System.

## Performance (at Initial Value)

- Contact Resistance ..... 100 mΩ Max. @1A,6VDC
- Operate Time ..... 10mSec. Max.
- Release Time ..... 10mSec. Max.
- Dielectric Strength:
  - Between Coil & Contact ..... 500VAC at 50/60 Hz for one minute.
  - Between Contacts ..... 500VAC at 50/60 Hz for one minute.
- Insulation Resistance ..... 100M Min. at 500VDC.
- Max. On/Off Switching:
  - Electrical..... 6 Cycles per Minute.
  - Mechanical..... 300 Cycles per Minute.

- Temperature Range.....-40~105 °C.
- Humidity Range .....45~80% RH.
- Coil Temperature Rise .....50 °C Max.
- Vibration:
  - Endurance ..... 10 to 55 Hz dual amplitude width 1.5 mm
  - Error Operation..... 10 to 55 Hz dual amplitude width 1.5mm.
- Shock:
  - Endurance .....1,000 m/S<sup>2</sup>.
  - Error Operation ..... 100 m/S<sup>2</sup>.
- Life Expectancy:
  - Electrical.....10<sup>5</sup> Operations at Rated Resistive Load.
  - Mechanical .....10<sup>6</sup> Operations at No load condition.
- Weight.....About 4 g.

## Safety Standard & Its File Number

NIL

## Coil Specification (at 20 °C)

Coil Sensitivity	Nominal Voltage(VDC)	Nominal Current (mA)	Coil Resistance (W±10%)	Power Consumption (W±10%)	Pull-In Voltage (VDC)	Drop-Out Voltage (VDC)	Maximum Allowable Voltage (VDC)
GIN	9	70.8	127	Abt. 0.64	60%	5%	130%
	12	53.3	225				
	24	26.7	900				
	48	26	1843	Abt. 0.8			

## Ordering Information

GIN	-SS-	1	12	D	M		
						<b>Contact Form:</b>	NIL One Form C M One Form A
						<b>Coil Type:</b>	D Standard DC Coil
						<b>Coil Voltage:</b>	09: 9V, 12: 12V, 24: 24V, 48: 48V
						<b>Number of Pole:</b>	1 Single Relay 2 Dual Relay
						<b>SS RT</b>	Flux Proofed Relays
						<b>SH RT</b>	Wash Tight Relays
						<b>TYPE:</b>	<b>GIN</b>

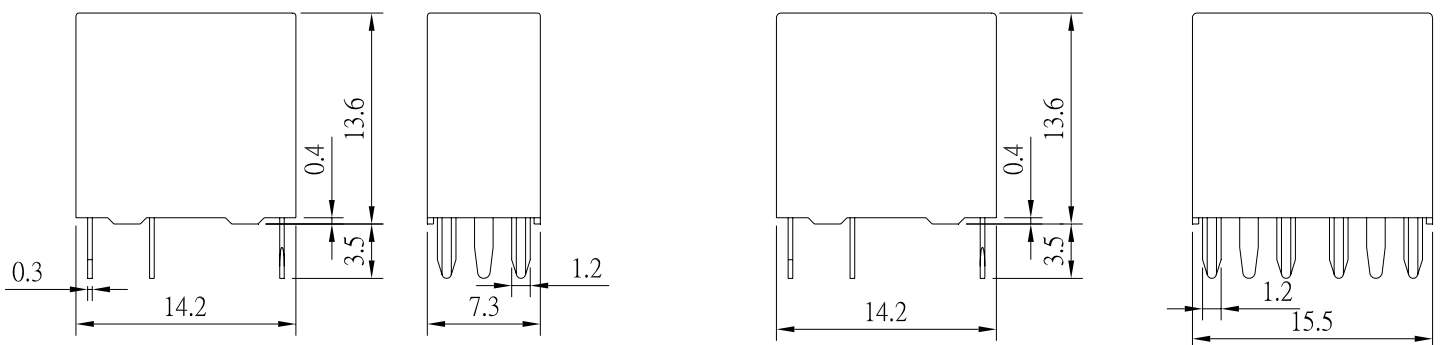
## Classification

Model	GIN			
	Single Relay		Dual Relay	
Single or Dual Relay				
Contact Form	1C	1A	2C	2A
Flux Proofed Relay	GIN-SS-1 D	GIN-SS-1 DM	GIN-SS-2 D	GIN-SS-2 DM
Wash Tight Relay	GIN-SH-1 D	GIN-SH-1 DM	GIN-SH-2 D	GIN-SH-2 DM

Dimension ( ≤ 5mm± 0.2mm, > 5mm ± 0.3mm, the tolerance of PCB thru hole: +0.1mm)

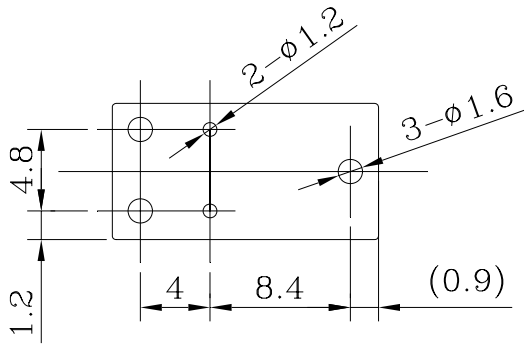
Single Type

Dual Type

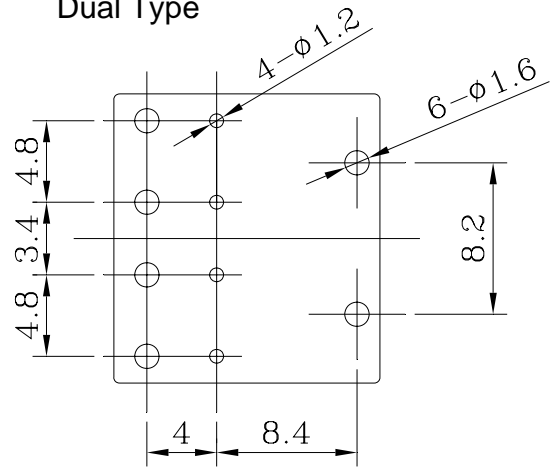


## PCB. Layout

Single Type

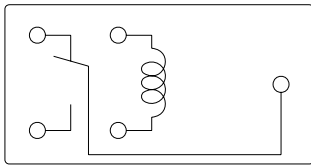


Dual Type



## Electric diagrams

Single Type



Dual Type

