

## Main Feature

1. Miniature size with rated loading 12A.
2. Insulation distance 4 mm Min. is designed.
3. Dielectric Strength 2,000 VAC. Surge Strength 5,000V.
4. 2.54 mm terminal pitch employment is equal to I.C. terminal pitch.
5. Comply with RoHS and REACH regulations

## Contact Rating

Load Type	UDH (DM/DB)	UDH (D)
Rated Load (Resistive)	12A 120 VAC	12A 120 VAC
	10A 250 VAC	10A 250 VAC
	12A 24 VDC	12A 24 VDC
Rated Carrying Current	12A	12A
Max. Allowable Voltage	AC 240V	AC 240V
	DC 110V	DC 110V
Max. Allowable Current	12A	12A
Max. Allowable Power Force	2,500VA	2,500VA
	280W	280W
Contact Material	Ag Alloy	Ag Alloy
Contact Form	SPST	SPDT

## Application

Cooking Appliances, Air Conditioners, Audio Equipment, Domestic Appliances, Car Control Units, etc.

## Performance (at Initial Value)

- Contact Resistance ..... 100mΩMax. @1A,6VDC
- Operate Time..... 7 mSec. Max.
- Release Time ..... 4 mSec. Max.
- Dielectric Strength:
  - Between Coil & Contact..... 2,000VAC at 50/60 Hz for one minute
  - Between Contacts ..... 750VAC at 50/60 Hz for one minute
- Surge Strength..... 5,000V (between Coil & Contact 1.2x50 μSec.)
- Insulation Resistance ..... 100 MegaΩ Min. at 500VDC
- Max. On/Off Switching:
  - Electrical ..... 6 Cycles per Minute
  - Mechanical ..... 300 Cycles per Minute

- Temperature Range .....-30~+65°C
- Humidity Range.....45~85% RH.
- Coil Temperature Rise .....40°C Max. (3~24V)  
50°C Max. (48V)
- Vibration:
  - Endurance.....10 to 55 Hz dual amplitude width 1.5m.
  - 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:
  - Mechanical .....10<sup>7</sup> Operations at No Load condition
  - Electrical .....10<sup>5</sup> Operations at Rated Resistive Load
- Weight.....About 9.5 g

## Safety Standard & File Number

- UL & C-UL.....E141060

## Coil Specification (at 20°C)

Coil Sensitivity	Nominal Voltage (VDC)	Nominal Current (mA)	Coil Resistance ( $\Omega \pm 10\%$ )	Power Consumption (W)	Pull-In Voltage (VDC)	Drop-Out Voltage (VDC)	Maximum Allowable Voltage (VDC)
UDH-D/DM	3	150	20	Abt. 0.45	75% Maximum	5% Minimum	130%
	5	86.2	56				
	6	75	80				
	9	50	180				
	12	37.5	320				
	24	20.9	1,150				
	48	13.7	3,500	Abt. 0.66			

## Ordering Information

UDH - SS - 1 12 D M

Contact Form:

Nil: One Form C

M: One Form A

B: One Form B

D: Standard DC

Coil Type:

Coil Voltage: 03: 3V, 05: 5V, 06: 6V, 09: 9V, 12: 12V, 24: 24V, 48: 48V

Number of Pole: 1: One Pole

Type of Sealing: SS: RT II Flux Proofed

SH: RT III Wash Tight

Type:

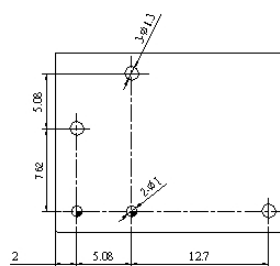
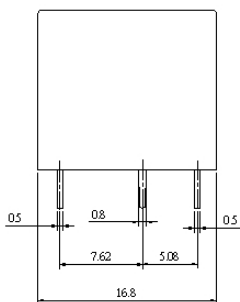
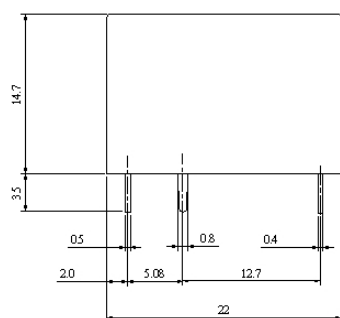
UDH

## Classification

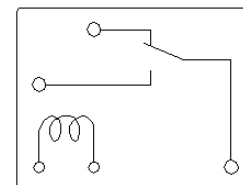
Model	UDH		
Contact Form	1C	1A	1B
Flux Proofed	UDH-SS-1□□D	UDH-SS-1□□DM	UDH-SS-1□□DB
Wash Tight	UDH-SH-1□□D	UDH-SH-1□□DM	UDH-SH-1□□DB

Dimension ( $\leq 5\text{mm} \pm 0.2\text{mm}$ ,  $> 5\text{mm} \pm 0.3\text{mm}$ , the tolerance of PCB thru hole:  $+0.1\text{mm}$ )

### UDH-SS/SH

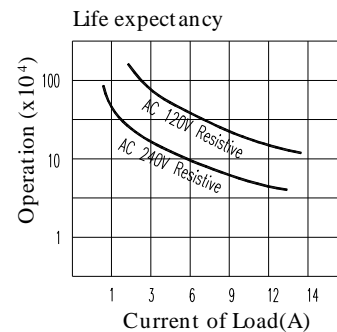
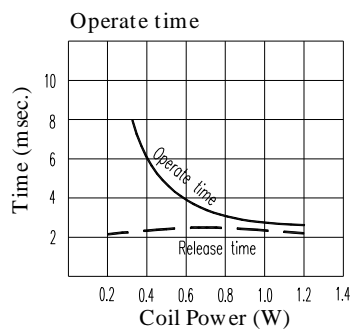
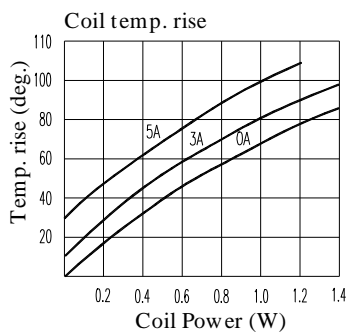


P.C.B. LAYOUT



BOTTOM VIEW

## Reference Data



V.01DS