

## Main Feature

1. Switching capacity 5A with two changeover contacts.
2. Insulation distance of 8mm Min. is designed.
3. Dielectric Strength of 5,000V Min. and Surge Strength 10,000V.
4. 1/8 Horse Power at 120VAC and 1/8 Horse Power at 250VAC are certified by UL.
5. TV-3 at 120VAC rating is approved by UL.
6. Halogen Free series available.
7. UL Class F insulation available.
8. Comply with RoHS and REACH regulations

## Contact Rating

Load Type	MI-2P (DM/LM)	MI-2P (D/L)
Rated Load (Resistive)	5A 250VAC	5A 250VAC
	5A 30VDC	5A 30VDC
Contact Capacity	TV-3 120VAC	TV-3 120VAC
	1/8HP 120VAC/250VAC	1/8HP 120VAC/250VAC
Rated Carrying Current	5A	5A
Max. Allowable Voltage	AC 240V	AC 240V
	DC 110V	DC 110V
Max. Allowable Current	5A	5A
Max. Allowable Power Force	1,250VA	1,250VA
	150W	150W
Contact Material	Ag Alloy	Ag Alloy
Contact Form	DPST	DPDT

## Application

Cooking Appliances, Air Conditioner, Audio Equipment, Domestic Appliances, Controlling Equivalent, etc.

## Performance (at Initial Value)

- Contact Resistance ..... 100mΩMax. @1A,6VDC
- Operate Time..... 15mSec. Max. (D Type)  
20mSec. Max. (L Type)
- Release Time ..... 8 mSec. Max.
- Dielectric Strength:  
Between Coil & Contact..... 5,000VAC at 50/60 Hz  
for one minute  
Between Contacts ..... 1,000VAC at 50/60 Hz  
for one minute
- Surge Strength..... 10,000V (between Coil  
& Contact 1.2x50μSec.)
- Insulation Resistance ..... 100 MegaΩ Min. at  
500VDC
- Max. On/Off Switching:  
Electrical ..... 20 Cycles per Minute  
Mechanical ..... 300 Cycles per Minute
- Temperature Range..... -30~+70°C
- Humidity Range ..... 45~85% RH.
- Coil Temperature Rise..... 45°C Max. (D Type)  
35°C Max. (L Type)

- Vibration:  
Endurance..... 10 to 55 Hz dual  
amplitude width 1.5mm  
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  
2.5x10<sup>4</sup> Operations at  
TV Rated Load
- Weight.....About 13.8 g

## Accessories & Sockets

- PI-50BE ..... See Page 179
- PI-50BE/3 ..... See Page 179
- PI-50-0 ..... See Page 181

## Safety Standard & File Number

- UL & C-UL.....E141060
- TÜV.....R09552069
- VDE (MI-D/DM/L/LM Type) ..40013086

## 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)
MI-2P D/DM Type	3	240	12.5	Abt. 0.72	80% Maximum	5% Minimum	130%
	5	138.9	36				
	6	120	50				
	9	78.3	115				
	12	60	200				
	15	48	313				
	18	38	470				
	21	34.3	612.5				
	24	29.3	820				
	28	25.7	1,089				
48	14.5	3,300					
MI-2P L/LM Type	3	176.5	17	Abt. 0.54	80% Maximum	5% Minimum	130%
	5	100	50				
	6	88	68				
	9	58	155				
	12	44.4	270				
	15	36	417				
	18	30	600				
	21	25.7	817				
	24	21.8	1,100				
	28	19.3	1,452				
48	10.9	4,400					

## Ordering Information

MI - SS - 2 12 D M F

Insulation System:

Nil: Standard Class

F: Class F

Contact Form:

Nil: Form C

M: Form A

B: Form B

Coil Type:

D: Standard DC

L: High DC

Coil Voltage:

03: 3V, 05: 5V, 06: 6V, 09: 9V, 12: 12V, 15: 15V,

18: 18V, 21: 21V, 24: 24V, 28: 28V, 48: 48V

Number of Pole:

2: Two Poles

Type of Sealing:

SS: RT II Flux Proofed

SH: RT III Wash Tight

Type:

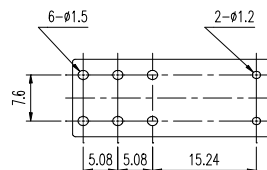
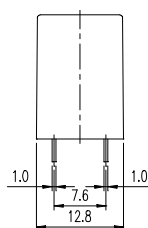
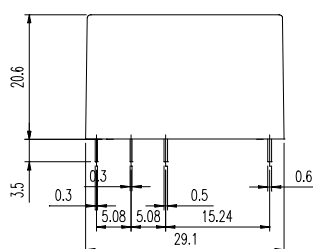
MI

## Classification

Model	MI - 2P					
Coil Sensitivity	Standard DC			High DC		
Contact Form	2C	2A	2B	2C	2A	2B
Flux Proofed	MI-SS-2□□D	MI-SS-2□□DM	MI-SS-2□□DB	MI-SS-2□□L	MI-SS-2□□LM	MI-SS-2□□LB
Wash Tight	MI-SH-2□□D	MI-SH-2□□DM	MI-SH-2□□DB	MI-SH-2□□L	MI-SH-2□□LM	MI-SH-2□□LB

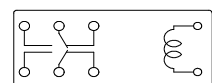
Dimension ( $\leq 5\text{mm} \pm 0.2\text{mm}$ ,  $> 5\text{mm} \pm 0.3\text{mm}$ , the tolerance of PCB thru hole:  $+0.1\text{mm}$ )

MI-2P-SS/SH



BOTTOM VIEW

P.C.B. Layout



BOTTOM VIEW

V.01DS