

OMI-2P系列产品规格书

文件编号: F-PS-001



系列 (Series)

OMI-2P

外型尺寸 (External Dimension)

29.2x12.8x20.6 mm

触点数据 (Contact Data)

触点形式 (Contact Arrangement)

2A (NO)

2C (CO)

额定电压 (Rated voltage)

277VAC/30VDC

额定电流 (Rated current)

3A/5A/8A

触点材料 (Contact Material)

Ag Alloy

接触电阻 (Contact Resistance)

≅ 100mΩ (6VDC, 1A)

线圈数据 (Coil Data)

磁系统 (Magnetic system)

直流 (DC)

线圈电压 (Coil Voltage)

3~48VDC

线圈功率 (瓦) (Coil power (W))

0.54W/0.72W

绝缘数据 (Insulation Data)

绝缘抵抗 (Insulation resistance)

≅ 1000MΩ (DC500V)

开路触点之间 (Open Contacts)

OP/OP ≅ 1000VAC

触点与线圈之间 (Contacts And Coil)

IP/OP ≅ 5000VAC

相邻触点之间 (Between adjacent contacts)

≅ 1800VAC

寿命数据 (Service life)

电气寿命 (Electrical Endurance)

1x10⁵

机械寿命 (Mechanical Endurance)

1x10⁷

环境数据 (Environmental data)

使用环境温度 (Operati Temperature)

-40~+105℃

环境保护类别 IEC 61810 (Type of environmental protection IEC 61810)

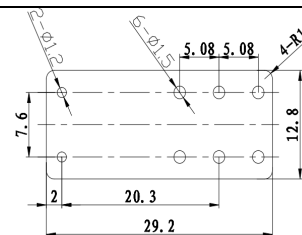
RT II, RTIII

其它数据 (Others Data)

重量 (Weight)

13g

脚位图 (Terminal Arrangement)



安装形式 (Mounting Method)

PCB

同行对照型号 (Peer Cross-Referemce)

对照型号 (Cross-Referemce)

OMRON: G2R
HongFa: HF115F
SongChuan: 888/793/845
WOMRON: SMI-2P

OMI 2P Series

FEATURES

- Outline dimension (29.2mmx12.8mmx20.6mm)
- 2 Form A and 2 Form C contact arrangement
- Meet UL、TUV、CQC requirements
- 5000VAC dielectric strength between coil and contact
- Sensitive and standard coils available
- Class F type available
- ROHS compliance
- REACH SvHC compliance
- Halogen-Free type available

APPLICATION

Appliances,Power Supplier,Industrial Control

COIL

COIL Voltage	3-48VDC	
COIL power	OMI 2P-L	540mW
	OMI 2P-D	720mW

COIL DATA@23°C

OMI 2P-L(540mW,Sensitive)				
NOMI 2Pnal coil voltage(VDC)	NOMI 2Pnal Curren	Coil Resistance (Ω)±10%	Operate Voltage (VDC Max)	Release Voltage (VDC Min)
3	176.5	17	2.25	0.15
5	103.1	48.5	3.75	0.25
6	88.2	68	4.5	0.3
9	58.1	155	6.75	0.45
12	44.4	270	9	0.6
18	30	600	13.5	0.9
24	21.8	1100	18	1.2
48	10.9	4400	36	2.4

OMI 2P-D(720mW,Standard)				
NOMI 2Pnal coil voltage(VDC)	NOMI 2Pnal Curren (mA)	Coil Resistance (Ω)±10%	Operate Voltage (VDC Max)	Release Voltage (VDC Min)
3	230.8	13	2.1	0.15
5	138.9	36	3.5	0.25
6	123.7	48.5	4.2	0.3
9	78.3	115	6.3	0.45
12	60	200	8.4	0.6
18	40	450	12.6	0.9
24	29.3	820	16.8	1.2
48	14.5	3300	33.6	2.4

8A MINIATURE POWER RELAY



CQC18002204331



R50420105



E502916

CONTACT DATA

Contact arrangement	2 Form A (NO),2 Form C (CO)
Contact material	Ag Alloy
Initial contact resistance	100mΩ max.@6VDC,1A
Max switching voltage	277VAC/30VDC
Max switching Current	8A
Max switching power	2000VA/240W
Contact rating(Resistive Load)	NO/NC Load
	3A/5A/8A@277VAC
	3A/5A/8A@30VDC
Mechanical endurance	10,000,000 ops Min(no load)
Electrical endurance	100,000 ops Min(rated load)
Minimum load(reference value)	100mA@5VDC

CHARACTERISTICS

Operate voltage	OMI 2P-L	75% of nominal voltage or less
	OMI 2P-D	70% of nominal voltage or less
Release voltage	10% of nominal voltage or more	
Operate time(@nominal voltage)	OMI 2P-L	15mS max.
	OMI 2P-D	15mS max
Release time(@nominal voltage)	8mS max	
Insulation resistance	1000MΩ min(at 500 VDC)	
Dielectric strength	Between coil and contacts	5000 VAC,50/60 HZ for 1 min
	Between open contacts	1000 VAC,50/60 HZ for 1 min
Surge voltage between coil and contacts	1000 V(1.2/50μs)	
Vibration resistance	Destruction	10 to 55 HZ.,1.5mm double amplitude
	Malfunction	10 to 55 HZ.,1.5mm double amplitude
Shock resistance	Destruction	1,000m/s(100G approximately)
	Malfunction	1,00m/s(10G approximately)
Ambient temperature	Operating:-40~+105°C(without icing or condensation)	
Ambient humidity	Operating:20% to 85% RH	
Terminal	Printed circuit terinals	
Enclosure(94V-0 Flammability Ratings)	SS : Sealed case type(RTII)	
	SH:Sealed case and ventilation hole sealed type(RTIII)	
Weight	Approx.13g	

ORDERING INFORMATION

OMI - SS - 2 12 L M * , 000

1.Product Family

2.Enclosure

SS = Sealed case type

SH = Sealed case and ventilation hole sealed type

3.Number of Poles

2=2 Pole

4.Rated Coil Voltage

03=3VDC 05=5VDC 06=6VDC 09=9VDC

12=12VDC 18=18VDC 24=24VDC 48=48VDC

5.Coil Power

D=Standard (720mW)

L=Sensitive (540mW)

6.Contact Arrangement

Blank=1 Form C,DPDT

M=1 Form A,DPST-NO

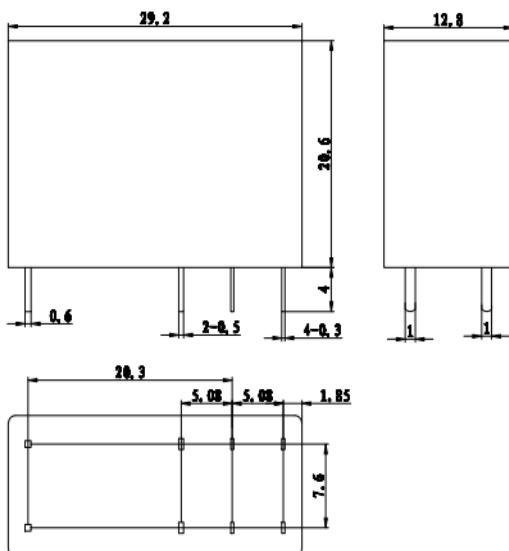
7.Contact Material

Blank=AgSnO,Use numbers or letters for special requirements

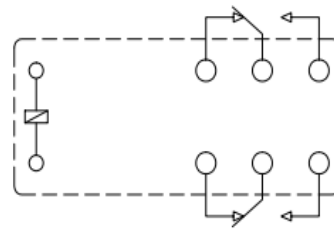
8.Additional numbers and/or letters

000=Standard model,Other Suffix=Customer model

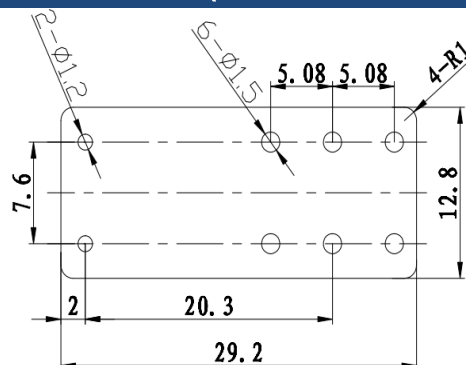
OUTLINE DIMENSION



WIRING DIAGRAMS(BOTTOM VIEWS)



PC BOARD LAYOUTS(BOTTOM VIEWS)



Remark: 1) The reference tolerance in outline dimension.

outline dimension ≤ 1 mm,reference tolerance is ± 0.02 mm.

outline dimension > 1 mm and ≤ 5 mm ,reference tolerance is ± 0.03 mm.

outline dimension > 5 mm ,reference tolerance is ± 0.05 mm.

2) The reference tolerance for PC Board layout is ± 0.1 mm.