



系列 (Series)

OMIH

外型尺寸 (External Dimension)

29.2x12.8x20.6 mm

触点数据 (Contact Data)

触点形式 (Contact Arrangement)

1A (NO)

1C (CO)

额定电压 (Rated voltage)

277VAC/30VDC

额定电流 (Rated current)

8A/16A

触点材料 (Contact Material)

Ag Alloy

接触电阻 (Contact Resistance)

$\leq 100m\Omega$ (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)

$\geq 1000M\Omega$ (DC500V)

开路触点之间 (Open Contacts)

OP/OP $\geq 1000VAC$

触点与线圈之间 (Contacts And Coil)

IP/OP $\geq 5000VAC$

寿命数据 (Service life)

电气寿命 (Electrical Endurance)

1×10^5

机械寿命 (Mechanical Endurance)

1×10^7

环境数据 (Environmental data)

使用环境温度 (Operati Temperature)

-40~+105°C

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

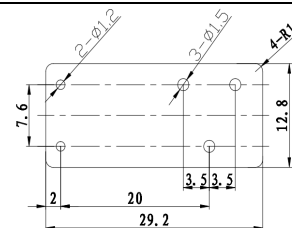
RT II, RTIII

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)

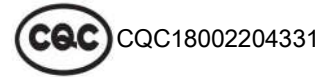
OMRON: G2R
HongFa: HF14FF
SongChuan: 888/793/845
SanYou: SMIH

OMIH Series

16A MINIATURE POWER RELAY

FEATURES

- Outline dimension (29.2mmx12.8mmx20.6mm)
- 1 Form A and 1 Form C contact arrangement
- Meet UL、TUV、CQC requirements
- 5000VAC dielectric strength between coil and conta
- 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	OMIH-L	540mW
	OMIH-D	720mW

COIL DATA@23°C

OMIH-L(540mW, Sensitive)				
NOMIHnal coil voltage(VDC)	NOMIHnal Curren (mA)	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

OMIH-D(720mW, Standard)				
NOMIHnal coil voltage(VDC)	NOMIHnal 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

CONTACT DATA

Contact arrangement	1 Form A (NO), 1 Form C (CO)
Contact material	Ag Alloy
Initial contact resistance	100mΩ max.@6VDC, 1A
Max switching voltage	277VAC/30VDC
Max switching Current	16A
Max switching power	4000VA/480W
Contact rating(Resistive Load)	NO/NC Load
	16A/8A@277VAC
	16A/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	OMIH-L	75% of nominal voltage or less
	OMIH-D	70% of nominal voltage or less
Release voltage	10% of nominal voltage or more	
Operate time(@nominal voltage)	OMIH-L	12mS max.
	OMIH-D	12mS max
Release time(@nominal voltage)	4mS 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
	Malfuction	10 to 55 HZ, 1.5mm double amplitude
Shock resistance	Destruction	1,000m/s(100G approximately)
	Malfuction	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

OMIH - SS - 1 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

1=1 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 (CO)

M=1 Form A (NO)

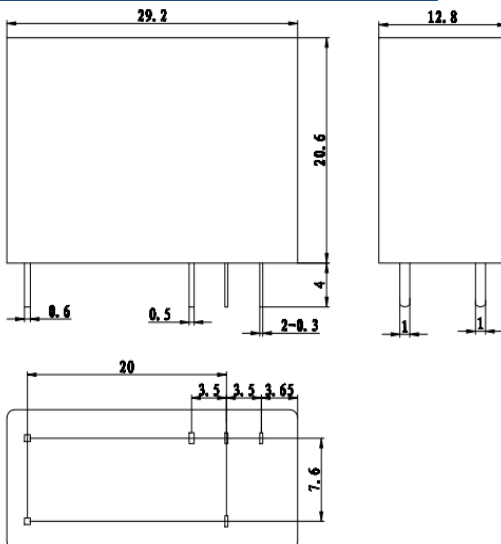
7.Contact Material

Blank=AgSnO,Use numbers or letters for special requirements

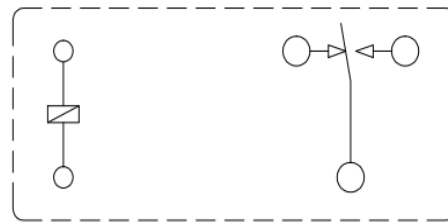
8.Additional numbers and/or letters

000=Standard model,Other Suffix=Customer model

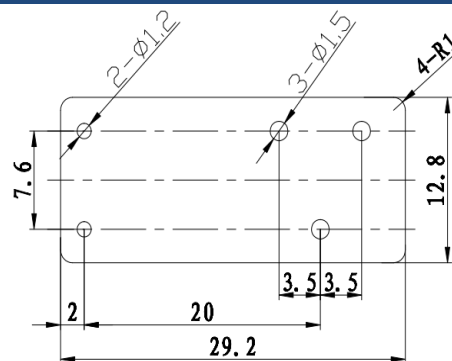
OUTLINE DIMENSION



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.