

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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OMI2 Pole series

2 Pole Miniature **Power PC Board Relay**

Appliances, HVAC, Office Machines.

FLI UL File No. E58304

© CSA File No. LR48471

VDE VDE File No. 6678

(S) SEMKO File No. 9517235

Users should thoroughly review the technical data before selecting a product part number. It is recommended that user also seek out the pertinent approvals files of the agencies/laboratories and review them to ensure the product meets the requirements for a given application.

Features

- Meet UL 508, VDE0435 and SEMKO requirements.
- · 2 Form A and 2 Form C contact arrangements.
- · Immersion cleanable, sealed version available.
- Meet 5,000V dielectric voltage between coil and contacts.
- Meet 10,000V surge voltage between coil and contacts (1.2 / $50\mu s$).

Contact Data @ 20°C

Arrangements: 2 Form A (DPST-NO) and 2 Form C (DPDT).

Material: Ag Alloy.

Max. Switching Rate: 300 ops./min. (no load).

30 ops./min. (rated load).

Expected Mechanical Life: 10 million operations (no load). Expected Electrical Life: 100,000 operations (rated load).

Minimum Load: 100mA @5VDC.

Initial Contact Resistance: 100 milliohms @1A, 6VDC.

Contact Ratings

Ratings: 5A @240VAC resistive, 5A @ 120VAC resistive, 5A @30VDC resistive. 1/8 HP @250VAC.

> 1.5A @240VAC inductive (cosø= 0.4), 1.5A @ 120VAC inductive (cosø= 0.4), 1.5A @24VDC inductive (L/R=7msec).

Max. Switched Voltage: AC: 240V. DC: 30V.

Max. Switched Current: 5A

Max. Switched Power: OMI: 1,200VA, 150W.

Initial Dielectric Strength

Between Open Contacts: 1,000VAC 50/60 Hz. (1 minute). Between Coil and Contacts: 5,000VAC 50/60 Hz. (1 minute). Surge Voltage Between Coil and Contacts: 10,000V (1.2 / 50µs).

Initial Insulation Resistance

Between Mutually Insulated Elements: 1,000M ohms min. @500VDCM.

Coil Data

Voltage: 5 to 48VDC.

Nominal Power: 720mW (OMI-D), 540mW (OMI-L). Coil Temperature Rise: 45°C max., at rated coil voltage.

Max. Coil Power: 130% of nominal.

Duty Cycle: Continuous.

Coil Data @ 20°C

OMI-L Sensitive						
Rated Coil Voltage (VDC)	Nominal Current (mA)	Coil Resistance (ohms) ± 10%	Must Operate Voltage (VDC)	Must Release Voltage (VDC)		
5	106.4	47	4.00	0.50		
6	88.0	68	4.80	0.60		
9	58.0	155	7.20	0.90		
12	44.4	270	9.60	1.20		
24	21.8	1,100	19.20	2.40		
48	10.9	4,400	38.40	4.80		

OMI-D Standard

OWI-D Standard						
Rated Coil	Nominal	Coil	Must Operate	Must Release		
Voltage	Current	Resistance	Voltage	Voltage		
(VDC)	(mA)	(ohms) ± 10%	(VDC)	(VDC)		
5	138.9	36	3.75	0.50		
	120.0	50	4.50	0.60		
9	78.3	115	6.75	0.90		
	60.0	200	9.00	1.20		
24	29.3	820	18.00	2.40		
48	14.5	3,300	36.00	4.80		

Operate Data

Must Operate Voltage:

OMI-D: 75% of nominal voltage or less. OMI-L: 80 % of nominal voltage or less. Must Release Voltage: 5% of nominal voltage or more.

Operate Time: OMI-D: 15 ms max.

OMI-L: 20 ms max.

Release Time: 8 ms max.

Environmental Data

Temperature Range: Operating: OMI-D:

-30°C to +55°C

OMI-L:

-30°C to +70 °C

Vibration, Mechanical: 10 to 55 Hz., 1.5mm double amplitude Operational: 10 to 55 Hz., 1.5mm double amplitude.

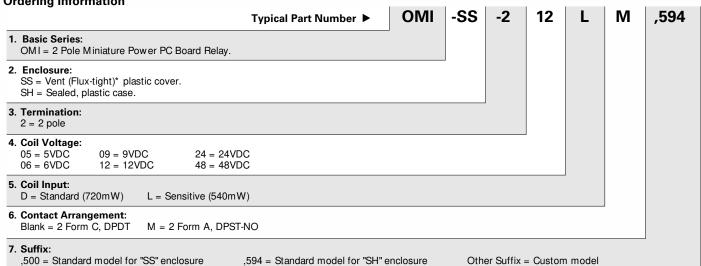
Shock, Mechanical: 1,000m/s² (100G approximately). Operational: 100m/s2 (10G approximately). Operating Humidity: 20 to 85% RH. (Non-condensing).

Mechanical Data

Termination: Printed circuit terminals. Enclosure (94V-0 Flammability Ratings): OMI-SS: Vented (Flux-tight) plastic cover.

OMI-SH: Sealed plastic case. Weight: 0.46 oz (13g) approximately.

Ordering Information

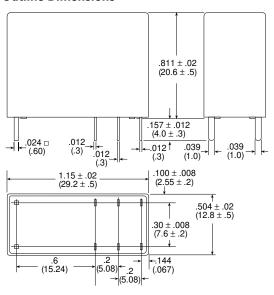


^{*} Not suitable for immersion cleaning processes.

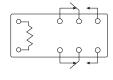
Our authorized distributors are more likely to stock the following items for immediate delivery.

OMI-SH-205D,594 OMI-SH-205L,594 OMI-SH-212D,594 OMI-SH-212L,594 OMI-SH-224D,594 OMI-SH-224L,594

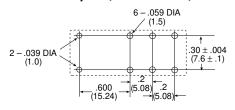
Outline Dimensions



Wiring Diagram (Bottom View)

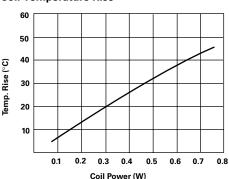


PC Board Layout (Bottom View)

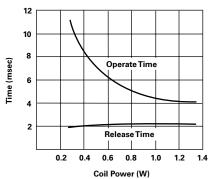


Reference Data

Coil Temperature Rise



Operate Time



Life Expectancy

