

**Power PCB relay OMI/OMIH**

- 1 pole 10/16A, 1 form A (NO) or 1 form C (CO) contact
- Meet 5000V dielectric voltage between coil and contacts
- Meet 10000V surge voltage between coil and contacts

Typical applications  
Home appliances, office machines



**Approvals**

VDE 40005414, UL E58304, CSA LR48471, SEMKO 613298(OMI), SEMKO 903200(OMIH), CQC 08001024660

Technical data of approved types on request

Contact Data	OMI	OMIH
Contact arrangement	1 form A (NO), 1 form C (CO)	
Rated voltage	250VAC	
Max. switching voltage	30VDC, 250VAC	
Rated current	10A	16A
Switching power	2500VA, 300W	4000VA, 480W
Contact material	AgSnO	
Min. recommended contact load	100mA, 5VDC	
Initial contact resistance	100mOhm at 1A 6VDC	
Frequency of operation, with/without load	1800/18000h <sup>-1</sup>	
Operate/release time max.		
standard coil:	15/8ms	
sensitive coil:	20/8ms	
Electrical endurance		
OMI : NO 10A, 250VAC, resistive,	100x10 <sup>3</sup> ops.	
OMIH :NO 16A, 250VAC, resistive,	100x10 <sup>3</sup> ops.	
OMI : NC 5A, 250VAC, resistive,	100x10 <sup>3</sup> ops.	
OMIH :NC 8A, 250VAC, resistive,	100x10 <sup>3</sup> ops.	
Contact ratings	10A, 250VAC (NO) 5A, 250VAC (NC)	16A, 250VAC/30VDC
Mechanical endurance	10x10 <sup>6</sup> operations	

**Coil Data**

Coil voltage range	5 to 48VDC
Coil insulation system according UL	class 105 (A)

**Coil Data (continued)**

**Coil versions, DC coil**

Coil code	Rated voltage VDC	Operate voltage VDC	Release voltage VDC	Coil resistance Ω±10%	Rated coil power mW
<b>Standard coil, 720mW</b>					
05	5	3.5	0.25	36	720
06	6	4.2	0.3	48.5	720
09	9	6.3	0.45	115	720
12	12	8.4	0.6	200	720
24	24	16.8	1.2	820	720
48	48	33.6	2.4	3300	720
<b>Sensitive coil, 540mW</b>					
05	5	3.75	0.25	48.5	540
06	6	4.5	0.3	68	540
09	9	6.75	0.45	155	540
12	12	9.0	0.6	270	540
24	24	18.0	1.2	1100	540
48	48	36.0	2.4	4400	540

All figures are given for coil without pre-energization, at ambient temperature +23°C.

**Insulation Data**

Initial dielectric strength	
between open contacts	1000V <sub>rms</sub>
between contact and coil	5000V <sub>rms</sub>
Initial surge withstand voltage	
between contact and coil	10000V
Initial insulation resistance	1000MΩ
Clearance/creepage	
between contact and coil	≥ 5.5/8mm

**Electrical endurance**



**Operate time**



**Coil temperature rise**



**Power PCB relay OMI/OMIH** (Continued)

**Other Data**

Material compliance: EU RoHS/ELV, China RoHS, REACH, Halogen content refer to the Product Compliance Support Center at [www.te.com/customersupport/rohssupportcenter](http://www.te.com/customersupport/rohssupportcenter)

Ambient temperature	
standard coil	-30 to 60°C
sensitive coil	-30 to 70°C
Category of environmental protection	
IEC 61810	RTII - flux proof, RTIII - wash tight
Vibration resistance (functional)	10 to 50Hz, 1.5mm double amplitude
Shock resistance (functional)	
IEC 60068-2-27 (half sine)	98m/s <sup>2</sup> , 11ms
Terminal type	PCB-THT
Weight	13g
Resistance to soldering heat THT	
IEC 60068-2-20	260°C/5s
Packaging/unit	box/1000 pcs.

**Terminal assignment**

Bottom view on solder pins



**PCB layout**

Bottom view on solder pins



**Dimensions**



**Product code structure**

Typical product code

**OMI -SS -1 12 D 1 ,300**

<b>Type</b>	OMI / OMIH Power PCB Relay OMI / OMIH	
<b>Sealing</b>	<b>SS</b> Flux proof	<b>SH</b> Wash tight
<b>Pole</b>	<b>1</b> 1pole	
<b>Coil</b>	Coil code: please refer to coil versions table	
<b>Coil power</b>	<b>D</b> Standard 720mW	<b>L</b> Sensitive 540mW
<b>Contact arrangement</b>	<b>1</b> OMIH : 1 form C (CO) AgSnO <b>M</b> OMIH : 1 form A (NO), AgSnO	<b>M1</b> OMI : 1form A (NO), AgSnO
<b>Suffix</b>	<b>Blank</b> Standard (OMI)	<b>300</b> Standard OMIH, 1 form C (CO), flux proof <b>394</b> Standard OMIH, 1form A (NO), wash tight

**Power PCB relay OMI/OMIH** (Continued)

Product code	Version	Contact	Cont.material	Coil power	Coil voltage	Sealing	Part number	
OMI-SS-105DM1	10A	1 form A (NO)	AgSnO	720mW	5VDC	Flux proof	1721129-3	
OMI-SS-112DM1					12VDC		1721129-9	
OMI-SS-124DM1					24VDC		1-1721129-3	
OMI-SS-105LM1				540mW	5VDC	1721129-4		
OMI-SS-112LM1					12VDC	1-1721129-0		
OMI-SS-124LM1					24VDC	1-1721129-4		
OMI-SS-105D1		1 form C (CO)			720mW	5VDC		1721130-3
OMI-SS-112D1						12VDC		1721130-9
OMI-SS-124D1						24VDC		1-1721130-3
OMI-SS-105L1					540mW	5VDC		1721130-4
OMI-SS-112L1						12VDC		1-1721130-0
OMI-SS-124L1						24VDC		1-1721130-4
OMI-SH-105DM1		1 form A (NO)		720mW	5VDC	Wash tight	1-1721129-9	
OMI-SH-112DM1					12VDC		2-1721129-5	
OMI-SH-124DM1					24VDC		2-1721129-9	
OMI-SH-105LM1				540mW	5VDC	2-1721129-0		
OMI-SH-112LM1					12VDC	2-1721129-6		
OMI-SH-124LM1					24VDC	3-1721129-0		
OMI-SH-105D1		1 form C (CO)			720mW	5VDC		1-1721130-9
OMI-SH-112D1						12VDC		2-1721130-5
OMI-SH-124D1						24VDC		2-1721130-9
OMI-SH-105L1					540mW	5VDC		2-1721130-0
OMI-SH-112L1						12VDC		2-1721130-6
OMI-SH-124L1						24VDC		3-1721130-0
OMIH-SS-105DM,300	16A	1 form A (NO)		720mW	5VDC	Flux proof	1461022-5	
OMIH-SS-112DM,300					12VDC		8-1440000-4	
OMIH-SS-124DM,300					24VDC		8-1440000-9	
OMIH-SS-105LM,300				540mW	5VDC	2-1419153-1		
OMIH-SS-112LM,300					12VDC	8-1440000-6		
OMIH-SS-124LM,300					24VDC	2-1419153-2		
OMIH-SS-105D1,300		1 form C (CO)			720mW	5VDC		1721535-1
OMIH-SS-112D1,300						12VDC		1721535-4
OMIH-SS-124D1,300						24VDC		1721535-7
OMIH-SS-105L1,300					540mW	5VDC		1721535-2
OMIH-SS-112L1,300						12VDC		1721535-5
OMIH-SS-124L1,300						24VDC		1721535-8
OMIH-SH-105DM,394		1 form A (NO)		720mW	5VDC	Wash tight	1-1461373-5	
OMIH-SH-112DM,394					12VDC		1-1461373-8	
OMIH-SH-124DM,394					24VDC		1-1461373-9	
OMIH-SH-105LM,394				540mW	5VDC	6-1440000-7		
OMIH-SH-112LM,394					12VDC	7-1440000-1		
OMIH-SH-124LM,394					24VDC	1461373-3		
OMIH-SH-105D1,300		1 form C (CO)			720mW	5VDC		1-1721535-1
OMIH-SH-112D1,300						12VDC		1-1721535-4
OMIH-SH-124D1,300						24VDC		1-1721535-7
OMIH-SH-105L1,300					540mW	5VDC		1-1721535-2
OMIH-SH-112L1,300						12VDC		1-1721535-5
OMIH-SH-124L1,300						24VDC		1-1721535-8