

# OEG

## **Power PCB relay OMI/OMIH**

- 1pole 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



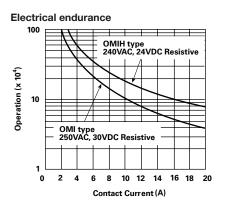
### Approvals

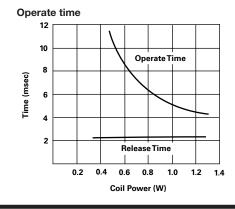
VDE 40005414, UL E58304, CSA LR48471, SEMKO 613298(OMI), SEMKO 903200(OMIH), CQC 08001024660 Technical data of approved types on request

Contact Data	OMI	OMIH		
Contact arrangement	1 form A (NO)	, 1 form C (CO)		
Rated voltage	250	)VAC		
Max. switching voltage	30VDC, 250VAC			
Rated current	10A	16A		
Switching power	2500VA, 300W	4000VA, 480W		
Contact material	Ag	SnO		
Min. recommended contact load	100m/	A, 5VDC		
Initial contact resistance	100mOhm	at 1A 6VDC		
Frequency of operation, with/without	load 1800/1	8000h <sup>-1</sup>		
Operate/release time max.				
standard coil:	15/	'8ms		
sensitive coil:	20/8ms			
Electrical endurance				
OMI : NO 10A, 250VAC, resistive,	100x1	0 <sup>3</sup> ops.		
OMIH :NO 16A, 250VAC, resistive	, 100x1	0 <sup>3</sup> ops.		
OMI : NC 5A, 250VAC, resistive,	100x10 <sup>3</sup> ops.			
OMIH :NC 8A, 250VAC, resistive,	100x1	0 <sup>3</sup> ops.		
Contact ratings	10A,	16A,		
-	250VAC (NO)	250VAC/30VDC		
	5A,			
	250VAC (NC)			
Mechanical endurance	10x10 <sup>6</sup> c	operations		

## **Coil Data**

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





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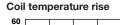
Coil Power (W)

#### Coil Data (continued)

Coil	Rated	Operate	Release	Coil	Rated coi						
code	voltage	voltage	voltage	resistance	power						
	VDC	VDC	VDC	Ω±10%	mW						
Standard coil, 720mW											
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						
Sensitive coil, 540mW											
05	5	3.75	0.25	48.5	540						
06	06 6		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	



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10

0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8

Rise

Temp.



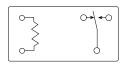
# Power PCB relay OMI/OMIH (Continued)

#### **Other Data**

Material compliance: EU RoHS/ELV, China RoHS, REACH, Halogen conten refer to the Product Compliance Support Center at						
	1 11					
www.te.cc	m/customersupport/rohssupportcenter					
Ambient temperature						
standard coil	-30 to 60°C					
sensitive coil	-30 to 70°C					
Category of environmental protection	n					
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/s², 11ms					
Terminal type	PCB-THT					
Weight	13g					
Resistance to soldering heat THT						
IEC 60068-2-20	260°C/5s					
Packaging/unit	box/1000 pcs.					

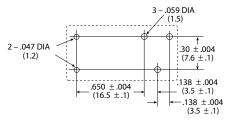
## Terminal assignment

Bottom view on solder pins

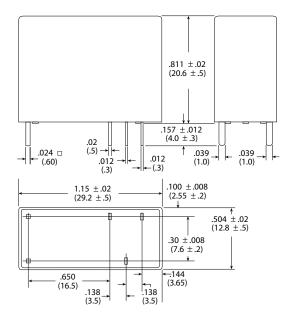


## PCB layout

Bottom view on solder pins



#### Dimensions



Prod	uct co	de structure		Typical product code OMI	-SS	-1	12	D	1	,300
Туре	OMI /	OMIH Power PCB Relay OMI / OMIH								
Sealin	g SS	Flux proof	SH	Wash tight						
Pole	1	1pole								
Coil	Coil co	de: please refer to coil versions table					-			
Coil p	ower D	Standard 720mW	L	Sensitive 540mW						
Conta	ct arra 1 M	ngement OMIH : 1 form C (CO) AgSnO OMIH : 1 form A (NO), AgSnO	<b>M</b> 1	OMI : 1form A (NO), AgSnO						
Suffix	Blank	Standard (OMI)	300 394	Standard OMIH, 1 form C (CO), flux proof Standard OMIH, 1form A (NO), wash tight						

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# 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			U		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		1 101111 (110)		1201111	12VDC	i faori agric	2-1721129-5
OMI-SH-124DM1					24VDC		2-1721129-9
OMI-SH-105LM1				540mW	5VDC		2-1721129-0
OMI-SH-112LM1				0101111	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				1 Lonny	12VDC		2-1721130-5
OMI-SH-124D1					24VDC		2-1721130-9
OMI-SH-105L1				540mW	5VDC		2-1721130-0
OMI-SH-112L1				0-01110	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	IUA			720111	12VDC	riux proor	8-1440000-4
OMIH-SS-124DM,300					24VDC		8-1440000-9
OMIH-SS-105LM,300				540mW	5VDC		2-1419153-1
OMIH-SS-112LM,300				0-01110	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-103D1,300				720111	12VDC		1721535-4
OMIH-SS-124D1,300					24VDC		1721535-4
OMIH-SS-105L1,300				540mW	5VDC		1721535-2
OMIH-SS-105L1,300				0401110	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-105DM,394		TIONTA (NO)		7201100	12VDC	wash tight	1-1461373-8
OMIH-SH-124DM,394					24VDC		
				540mW	5VDC		1-1461373-9
OMIH-SH-105LM,394				3401117	12VDC		6-1440000-7
OMIH-SH-112LM,394					24VDC		7-1440000-1
OMIH-SH-124LM,394		1 form C (CO)	-	720mW			1461373-3
OMIH-SH-105D1,300				1201100	5VDC 12VDC		1-1721535-1
OMIH-SH-112D1,300							1-1721535-4
OMIH-SH-124D1,300				540mW	24VDC		1-1721535-7
OMIH-SH-105L1,300				540MVV	5VDC		1-1721535-2
OMIH-SH-112L1,300					12VDC		1-1721535-5
OMIH-SH-124L1,300					24VDC		1-1721535-8

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