

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	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 ⁻¹	
Operate/release time max.		
standard coil:	15/8ms	
sensitive coil:	20/8ms	
Electrical endurance		
OMI : NO 10A, 250VAC, resistive,	100x10 ³ ops.	
OMIH : NO 16A, 250VAC, resistive,	100x10 ³ ops.	
OMI : NC 5A, 250VAC, resistive,	100x10 ³ ops.	
OMIH : NC 8A, 250VAC, resistive,	100x10 ³ ops.	
Contact ratings	10A, 250VAC (NO) 5A, 250VAC (NC)	16A, 250VAC/30VDC
Mechanical endurance	10x10 ⁶ operations	

Coil Data

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

Coil Data (continued)

Coil versions, DC coil

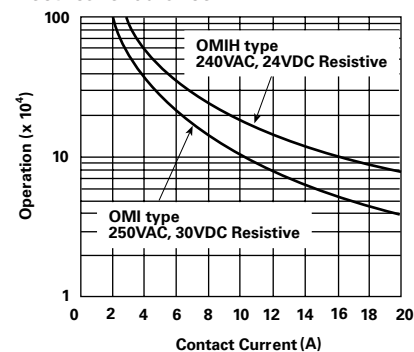
Coil code	Rated voltage VDC	Operate voltage VDC	Release voltage VDC	Coil resistance $\Omega \pm 10\%$	Rated coil power mW
Standard coil, 720mW					
05	5	3.5	0.25	36	720
06	6	4.2	0.3	48.5	720
09	9	6.3	0.45	115	720
12	12	8.4	0.6	200	720
24	24	16.8	1.2	820	720
48	48	33.6	2.4	3300	720
Sensitive coil, 540mW					
05	5	3.75	0.25	48.5	540
06	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.

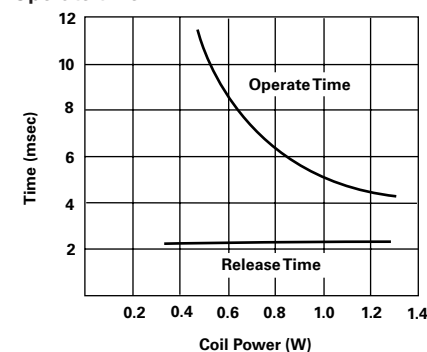
Insulation Data

Initial dielectric strength	
between open contacts	1000V _{rms}
between contact and coil	5000V _{rms}
Initial surge withstand voltage	
between contact and coil	10000V
Initial insulation resistance	1000M Ω
Clearance/creepage	
between contact and coil	$\geq 5.5/8\text{mm}$

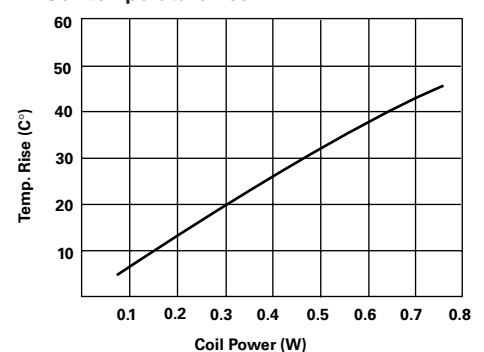
Electrical endurance



Operate time



Coil temperature rise



Power PCB relay OMI/OMIH (Continued)

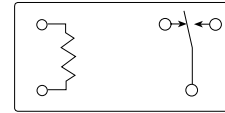
Other Data

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

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 ² , 11ms
Terminal type	PCB-THT
Weight	13g
Resistance to soldering heat THT	
IEC 60068-2-20	260°C/5s
Packaging/unit	box/1000 pcs.

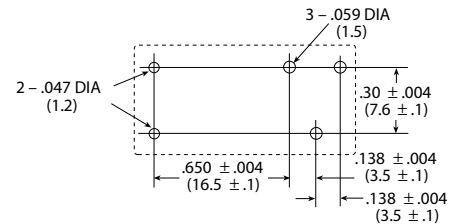
Terminal assignment

Bottom view on solder pins

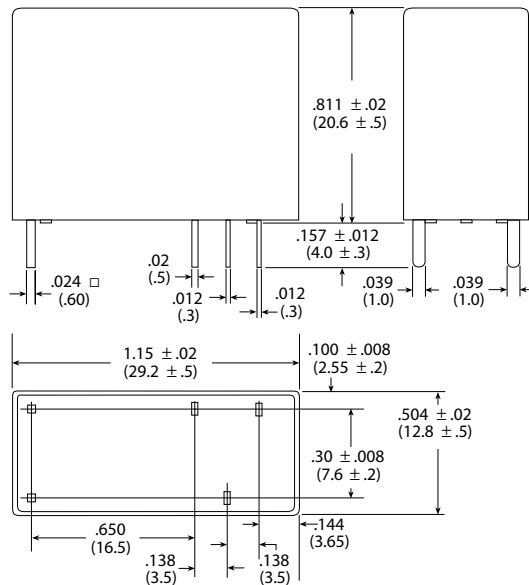


PCB layout

Bottom view on solder pins



Dimensions



Product code structure

Typical product code

OMI -SS -1 12 D 1 ,300

Type	OMI / OMIH Power PCB Relay OMI / OMIH		
Sealing	SS Flux proof	SH	Wash tight
Pole	1 1pole		
Coil	Coil code: please refer to coil versions table		
Coil power	D Standard 720mW	L	Sensitive 540mW
Contact arrangement	1 OMIH : 1 form C (CO) AgSnO M OMIH : 1 form A (NO), AgSnO	M1	OMI : 1form A (NO), AgSnO
Suffix	Blank Standard (OMI)	300	Standard OMIH, 1 form C (CO), flux proof
		394	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				540mW	24VDC		1-1721129-3
OMI-SS-105LM1					5VDC		1721129-4
OMI-SS-112LM1		1 form C (CO)		720mW	12VDC		1-1721129-0
OMI-SS-124LM1					24VDC		1-1721129-4
OMI-SS-105D1				540mW	5VDC		1721130-3
OMI-SS-112D1					12VDC		1721130-9
OMI-SS-124D1		1 form A (NO)		720mW	24VDC	Wash tight	1-1721130-3
OMI-SS-105L1					5VDC		1721130-4
OMI-SS-112L1				540mW	12VDC		1-1721130-0
OMI-SS-124L1					24VDC		1-1721130-4
OMI-SH-105DM1		1 form C (CO)		720mW	5VDC		1-1721129-9
OMI-SH-112DM1					12VDC		2-1721129-5
OMI-SH-124DM1				540mW	24VDC		2-1721129-9
OMI-SH-105LM1					5VDC		2-1721129-0
OMI-SH-112LM1		1 form A (NO)		720mW	12VDC		2-1721129-6
OMI-SH-124LM1					24VDC		3-1721129-0
OMI-SH-105D1				540mW	5VDC		1-1721130-9
OMI-SH-112D1					12VDC		2-1721130-5
OMI-SH-124D1		1 form C (CO)		720mW	24VDC		2-1721130-9
OMI-SH-105L1					5VDC		2-1721130-0
OMI-SH-112L1				540mW	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				540mW	24VDC		8-1440000-9
OMIH-SS-105LM,300					5VDC		2-1419153-1
OMIH-SS-112LM,300		1 form C (CO)		720mW	12VDC		8-1440000-6
OMIH-SS-124LM,300					24VDC		2-1419153-2
OMIH-SS-105D1,300				540mW	5VDC		1721535-1
OMIH-SS-112D1,300					12VDC		1721535-4
OMIH-SS-124D1,300		1 form A (NO)		720mW	24VDC	Wash tight	1721535-7
OMIH-SS-105L1,300					5VDC		1721535-2
OMIH-SS-112L1,300				540mW	12VDC		1721535-5
OMIH-SS-124L1,300					24VDC		1721535-8
OMIH-SH-105DM,394		1 form C (CO)		720mW	5VDC		1-1461373-5
OMIH-SH-112DM,394					12VDC		1-1461373-8
OMIH-SH-124DM,394				540mW	24VDC		1-1461373-9
OMIH-SH-105LM,394					5VDC		6-1440000-7
OMIH-SH-112LM,394		1 form A (NO)		720mW	12VDC		7-1440000-1
OMIH-SH-124LM,394					24VDC		1461373-3
OMIH-SH-105D1,300				540mW	5VDC		1-1721535-1
OMIH-SH-112D1,300					12VDC		1-1721535-4
OMIH-SH-124D1,300		1 form C (CO)		720mW	24VDC		1-1721535-7
OMIH-SH-105L1,300					5VDC		1-1721535-2
OMIH-SH-112L1,300				540mW	12VDC		1-1721535-5
OMIH-SH-124L1,300					24VDC		1-1721535-8