Miniature PCB Relay OUDH

- **Low profile miniature power relay**
- **Meets 2kV dielectric between coil and contacts**
- **Meets 5kV surge voltage**
- **Immersion cleanable, sealed version available**

Typical applications
Appliances, HVAC, office machines

Approvals

UL E58304
Technical data of approved types on request

Contact Data

Contact arrangement	1 form A, 1 NO
Rated voltage	120VAC, 28VDC
Max. switching voltage	240VAC, 110VDC
Rated current	10A
Contact material	Ag/AgCdO, AgSnO, AgNi
Min. recommended contact load	100mA, 5VDC
Frequency of operation	1800 ops./h
Operate/release time max.	10ms/5ms
Electrical endurance	
AgCdO: form A of form C, 7.5A, 26VAC, 85°C, General Use,	$30x10^3$ ops.
AgCdO: form A, 7.5A, 26VAC, 85°C, General Use	$30x10^3$ ops.
AgNi: 7A, 250VAC, General Use,	$100x10^3$ ops.
AgSnO: form A and B,10A, 250VAC,10A, 28VDC, General Use	$6x10^3$ ops.
Contact ratings	10A 120VAC res. 10A 28VDC res. 1/4HP 120VAC
Mechanical endurance, DC coil	$10x10^6$ operations

Coil Data

Coil voltage range	5 to 48VDC
Operative range, IEC 61810	2
Coil insulation system according UL	Class A, F

Coil versions, DC coil

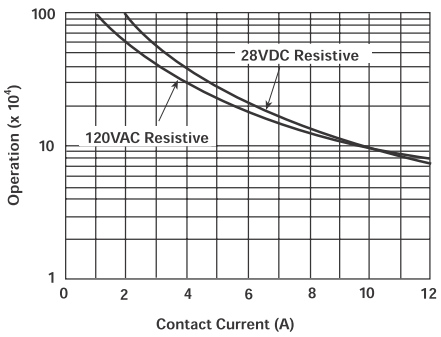
Coil code	Rated voltage VDC	Operate voltage VDC	Release voltage VDC	Coil resistance Ω±10%	Rated coil power mW
003	3	2.25	0.3	20	450
005	5	3.75	0.5	56	450
006	6	4.5	0.6	80	450
009	9	6.75	0.9	180	450
012	12	9	1.2	320	450
024	24	18	2.4	1280	450
048	48	36	4.8	3500	450

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

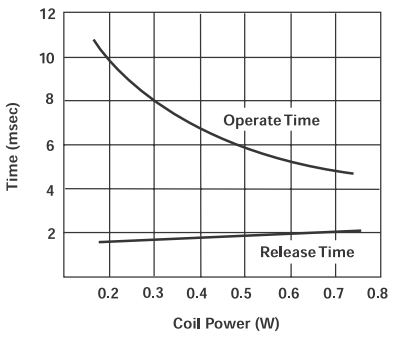
Insulation Data

Initial dielectric strength	
between open contacts	750Vrms
between contact and coil	2000Vrms
Clearance/creepage	
between open contacts	>1.6mm
between contact and coil	>3.2mm

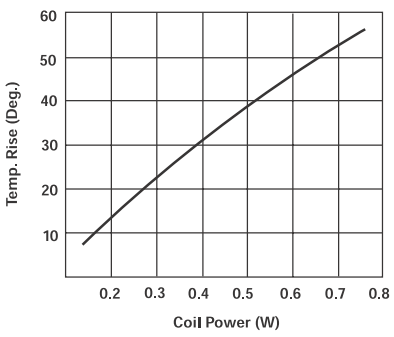
Electrical endurance



Operate time



Coil temperature rise



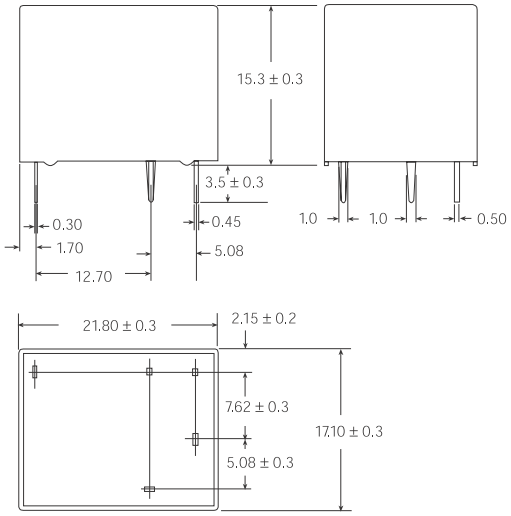
04-2011, Rev. 0411
www.te.com

Miniature PCB Relay OUDH (Continued)

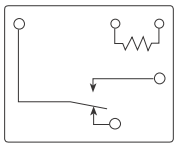
Other Data

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	-30°C to +60°C
Category of environmental protection	
IEC 61810	RTII - dust protected RTIII - wash tight
Shock resistance (functional)	10g
Shock resistance (destructive)	100g
Weight	10g
Resistance to soldering heat THT	
IEC 60068-2-20	RTII: 270°C/10s RTIII: 260°C/5s
Packaging/unit	tube/40, carton box/1000

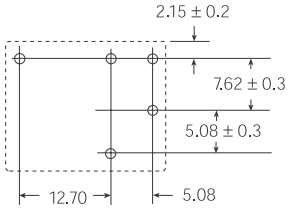
Dimensions



Terminal assignment
Bottom view on solder pins



PCB layout
Bottom view on solder pins



Product code structure

Typical product code: **OUDH -SH -1 12 D M F ,000**

Type
OUDH Miniature PCB Relay OUDH

Category of protection
S Solder flux type **SS** Flux proof **SH** Wash tight

Contact form
1 1 pole

Coil voltage
Coil code: please refer to coil versions table (e.g. 12 = 12VDC)

Coil resistance
D Standard **L** High sensitivity

Contact arrangement
Blank 1 form C, 1 CO **M** 1 form A, 1 NO **B** 1 form B, 1 NC

Insulation system
Blank Class 105 (A) **F** Class 155 (F)

Suffix
,000 Standard

Product code	Enclosure	Coil	Arrangement	Insulation	Part number
OUDH-SH-105D,000	wash tight	5VDC	1 form C, 1 CO	Class A	7-1419145-3
OUDH-SS-112D2	Flux proof	12VDC			1721551-5
OUDH-SS-112D,000					8-1419129-0
OUDH-SH-112D,000	Wash tight				7-1419129-2
OUDH-SS-112DF,000	Flux proof			Class F	1461211-3
OUDH-SS-124D,000		24VDC		Class A	8-1419129-5
OUDH-SH-124D,000	Wash tight				7-1419129-4
OUDH-SS-124DF,000	Flux proof			Class F	1461211-1