

## Miniature PCB Relay OJT

- UL TV-5 rating
- Small size
- 4000Vrms coil to contact dielectric strength
- Sensitive coil optional



Typical applications  
Consumer electronics, appliances, industrial control



### Approvals

VDE 40007630, TUV R 50139166, UL E82292, CQC08001025528  
Technical data of approved types on request

### Contact Data

Contact arrangement	1 form A, 1 NO	
Rated voltage	250VAC	
Max. switching voltage	250VAC	
Rated current	5A	
Contact material	AgSnO <sub>2</sub>	
Min. recommended contact load	100mA at 5VDC	
Frequency of operation	360 ops./h	
Operate/release time max.	15ms/4ms	
Electrical endurance		
DM TV-5, 120VAC	25x10 <sup>3</sup> ops.	
DM 5A, 250VAC res, +85°C	10x10 <sup>3</sup> ops.	
LM TV-5, 120VAC	25x10 <sup>3</sup> ops.	
LM 5A, 250VAC res, +70°C	100x10 <sup>3</sup> ops.	
Contact ratings	TV-5 120VAC 5A 250VAC	
Mechanical endurance, DC coil	5x10 <sup>6</sup> operations	

### Coil Data

Coil voltage range	3 to 48VDC
Operative range, IEC 61810	2
Coil insulation system according UL	Class E, F

### Coil versions, DC coil, OJT-LM sensitive type

Coil code	Rated voltage VDC	Operate voltage VDC	Release voltage VDC	Coil resistance $\Omega \pm 10\%$	Rated coil power mW
003	3	2.25	0.15	36	250
005	5	3.75	0.25	100	250
006	6	4.5	0.3	144	250
009	9	6.75	0.45	324	250
012	12	9	0.6	576	250
024	24	18	1.2	2304	250
036	36	27	1.8	5184	250
048	48	36	2.4	9216	250

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

### Contact Data (continued)

#### Coil versions, DC coil, OJT-DM standard type

Coil code	Rated voltage VDC	Operate voltage VDC	Release voltage VDC	Coil resistance $\Omega \pm 10\%$	Rated coil power mW
003	3	2.1	0.15	20	450
005	5	3.5	0.25	55.6	450
006	6	4.2	0.3	80	450
009	9	6.3	0.45	180	450
012	12	8.4	0.6	320	450
024	24	16.8	1.2	1280	450
036	36	25.2	1.8	2880	450
048	48	33.6	2.4	5120	450

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

### Insulation Data

Initial dielectric strength	
between open contacts	750V <sub>rms</sub>
between contact and coil	4000V <sub>rms</sub>
Clearance/creepage	
between contact and coil	>3.2/6.4mm

### Other Data

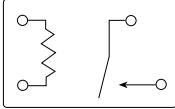
Material compliance: EU RoHS/ELV, China RoHS, REACH, Halogen content refer to the Product Compliance Support Center at [www.te.com/customer-support/rohssupportcenter](http://www.te.com/customer-support/rohssupportcenter)

Ambient temperature	-30°C to +85°C
Category of environmental protection IEC 61810	RTII - dust protected RTIII - wash tight
Shock resistance (functional)	10g
Shock resistance (destructive)	100g
Resistance to soldering heat THT IEC 60068-2-20	RTII: 270°C/10s RTIII: 260°C/5s
Packaging unit	tray/100, Carton box/1000

## Miniature PCB Relay OJT (Continued)

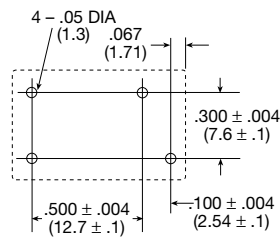
### Terminal assignment

Bottom view on solder pins

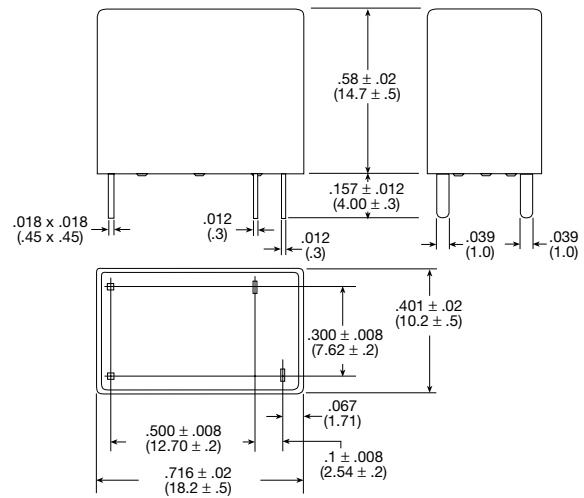


### PCB layout

Bottom view on solder pins



### Dimensions



### Product code structure

Typical product code

**OJT -SS -1 12 LM F -WG ,000**

#### Type

**OJT** Miniature PCB Relay OJT

#### Category of protection

**SS** flux proof  
**SH** wash tight

#### Number of poles

**1** 1 pole

#### Coil voltage

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

#### Contact rating and coil power

**DM** 450 mW coil power 5A type, coil power 450mW  
**LM** 200mW coil power 5A type, coil power 200mW

#### Insulation system designation

**Blank** Insulation Class E (standard)  
**F** Insulation Class F

#### Special type

**Blank** Standard  
**WG** For domestic appliances (IEC 60335-1, 4 Edition)

#### Suffix

**,000** Standard

Product code	Enclosure	Coil voltage	Coil power	Insulation	Part Number
OJT-SH-112DM,000	Wash tight	12VDC	450mW	Class E	1461116-1
OJT-SH-124DM,000	Wash tight	24VDC	450mW	Class E	1-1461116-5
OJT-SS-103LM,000	Flux proof	3VDC	250mW	Class E	1461492-1
OJT-SS-105LM,000	Flux proof	5VDC	250mW	Class E	1461492-2
OJT-SS-109DM,000	Flux proof	9VDC	450mW	Class E	1461116-5
OJT-SS-112DM,000	Flux proof	12VDC	450mW	Class E	1-1461116-3
OJT-SS-112LM,000	Flux proof	12VDC	250mW	Class E	1461492-5
OJT-SS-124LM,000	Flux proof	24VDC	250mW	Class E	1461492-7