

# **Miniature PCB Relay OJT**

- UL TV-8 rating (HM type) and UL TV-5 rating (LM/DM type)
- 10A rating (HM type) and 5A rating (LM/DM type)
- Small size (18.2 x 10.2 x 15.2H)
- 4000Vrms coil to contact dielectric strength
- Sensitive coil optional (LM type)



Typical applications Lighting, smart plug, appliances, industrial control.

## Contact Data (continued)

## Approvals

VDE 40007630, TUV R 50432700, UL E82292, CQC08001025528 Technical data of approved types on request

Contac	ct Data				
Contact	arrangement	1 form A, 1 NO			
Rated vo	ltage	250VAC			
Max. swi	tching voltage	250VAC			
Rated cu	ırrent	10A (OJT-HM)			
		5A (OJT-LM/DM)			
Contact	material	AgSnO			
Min. reco	ommended contact load	100mA at 5VDC			
Frequence	cy of operation	360 ops./h			
Operate/	release time max.	15ms/4ms			
Electrical	lendurance				
UL508					
HM	TV-8, 120VAC	25x10 <sup>3</sup> ops.			
LM	TV-5, 120VAC	25x10 <sup>3</sup> ops.			
DM	TV-5, 120VAC	25x10 <sup>3</sup> ops.			
UL/CQC	/TUV/VDE				
HM	10A, 250VAC, +85°C	10x10 <sup>3</sup> ops.			
HM	10A, 250VAC, +25°C	30x10 <sup>3</sup> ops.			
UL/CQC	/VDE				
DM	5A, 250VAC res, +85°C	10x10 <sup>3</sup> ops.			
LM	5A, 250VAC res, +70°C	100x10 <sup>3</sup> ops.			
Contact	ratings	LM/DM: TV-5 120VAC			
		LM/DM: 5A 250VAC			
		HM: TV-8 120VAC			
		HM: 10A 250VAC			
Mechani	cal endurance, DC coil	DM/LM: 5x10 <sup>6</sup> operations			
		HM: 1.5x10 <sup>6</sup> operations			

Coil Data	
Coil voltage range	DM/LM: 5 to 48VDC
	HM: 5, 12 and 24VDC
Operative range, IEC 61810	2
Coil insulation system according UL	Class F

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

Coil	Rated	Operate	Release	Coil	Rated coil
code	voltage	voltage	voltage	resistance	power
	VDC	VDC	VDC	Ω±10%	mW
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.

9-2019, Rev. 0919 www.te.com © 2019 TE Connectivity Ltd. family of companies. All rights reserved.

Catalog and product specification according to IEC 61810-1 and to be used only together with the 'Definitions' section.

Coil vers	sions, DC co	il, OJT-DM	standard typ	е	
Coil	Rated	Operate	Release	Coil	Rated coil
code	voltage	voltage	voltage	resistance	power
	VDC	VDC	VDC	Ω±10%	mW
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

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

	Sions, DC CO	II, OJ I-I IIVI	Stanuaru typ	6	
Coil	Rated	Operate	Release	Coil	Rated coil
code	voltage	voltage	voltage	resistance	power
	VDC	VDC	VDC	Ω±10%	mW
005	5	3.5	0.25	55.6	450
012	12	8.4	0.6	320	450
024	24	16.8	1.2	1280	450
A 11 C					

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	≥ 6.4mm / 6.4mm

## Other Data

Material compliance: EU RoHS/ELV,	China RoHS, REACH, Halogen content
refer to the	Product Compliance Support Center at
www.te.co	om/customersupport/rohssupportcenter
Ambient temperature	-30°C to +85°C
Category of environmental protectio	n
IEC 61810	RTII - flux proof
	RTIII - wash tight (LM/DM type only)
Shock resistance (functional)	10g
Shock resistance (destructive)	100g
Weight	Approx. 6.0g
Resistance to soldering heat THT	
IEC 60068-2-20	RTII: 270°C/10s
	RTIII: 260°C/5s
Packaging unit	tray/100, Carton box/1000
	tube/50, Carton box/2000

Catalog and product data is subject to the terms of the disclaimer and all chapters of the 'Definitions' section, available at https://relays.te.com/definitions

Catalog product data, 'Definitions' section, application notes and all specifications are subject to change.

1



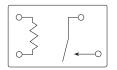
## General Purpose Low Power PCB Relays

# Miniature PCB Relay OJT (Continued)

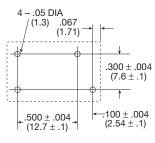
Dimensions

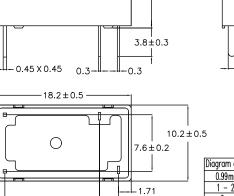
#### Terminal assignment

Bottom view on solder pins



PCB layout Bottom view on solder pins





 $-2.54 \pm 0.2$ 

 $12.7 \pm 0.2$ 

15.2±0.5



Prod	uct co	de structure		Typical p	roduct code	0.	JT ·	-SS	-1	12	LM	F	-WG	,000
Туре														
	OJT	Miniature PCB Relay OJT												
Categ	ory of	protection												
	SS	flux proof												
	SH	wash tight (option for LM/DN	∕l types	only)										
Numb	per of p	oles												
	1	1 pole												
Coil v	oltage													
	Coil co	ode: please refer to coil versio	ns table	(e.g. 12 = 12VDC)										
Conta	act ratir	ig and coil power												
		450 mW coil power		450 mW coil pow	er		250mV	V coil p	oower					
	DM	5A type, TV-5	HM	10A type, TV-8		LM	5A type	e, TV-5	5					
Insula	ation sy	stem designation												
	Blank	or <b>F</b> Insulation Class F												
Speci	ial type													
	Blank	Standard		WG IEC	60335-1 com	npliant								
Suffix	1													
	,000	Standard												

Product code	Enclosure	Coil voltage	Coil power	Insulation	Part Number
OJT-SH-112DM,000	Wash tight	12VDC	450mW	Class F	1461116-1
OJT-SH-124DM,000		24VDC			1-1461116-5
OJT-SS-105LM,000	Flux proof	5VDC	250mW		1461492-2
OJT-SS-109DM,000		9VDC	450mW		1461116-5
OJT-SS-112DM,000		12VDC			1-1461116-3
OJT-SS-112LM,000		12VDC	250mW		1461492-5
OJT-SS-124LM,000		24VDC			1461492-7
OJT-SS-105HM,00000		5VDC	450mW		2071508-1
OJT-SS-112HM,00000		12VDC			2071507-1
OJT-SS-124HM,00000		24VDC			2071509-1

Other types on request.

This list represents the most common types and does not show all variants covered by this data sheet.

2

Catalog and product specification according to IEC 61810-1 and to be used only together with the 'Definitions' section.

Catalog and product data is subject to the terms of the disclaimer and all chapters of the 'Definitions' section, available at <a href="https://relays.te.com/definitions">https://relays.te.com/definitions</a>

Catalog product data, 'Definitions' section, application notes and all specifications are subject to change.

# OEG