

OEG

Miniature PCB Relay PCJ

- 1pole 3A/5A, 1 form A (NO) contact
- Sensitive coil 200mW
- Ambient temperature 85°C
- RoHS compliant (Directive 2002/95/EC)
- WG version : Product in accordance to IEC60335-1



F0276-C

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2880

200

Approvals

Typical applications

Home appliances

VDE 40009151, UL E58304, CSA LR48471-211, CQC 03001008593 Technical data of approved types on request

Contact Data	
Contact arrangement	1 form A (NO)
Rated voltage	250VAC
Max. switching voltage	30VDC, 250VAC
Rated current	3A/5A
Switching power	1,250VA, 150W
Contact material	AgNi
Min. recommended contact load	100mA, 5VDC
Initial contact resistance	100mΩ at 1A, 6VDC
Frequency of operation, with/without load	1800/18000h ⁻¹
Operate/release time max.	10/4ms
Electrical endurance	
3A version: 250VAC, resistive,	100x10 ³ ops.
5A version: 250VAC, resistive,	100x10 ³ ops.

Contact ratings

Туре	Contact	Load	Cycles		
IEC 61	810				
PCJ	form A (NO)	5A,250VA	AC, cosφ=1,	85°C	100x10 ³
PCJ	form A (NO)	2A,250VA	AC, $\cos \varphi = 0.6$	85°C	100x10 ³
PCJ	form A (NO)	3A,250VA	AC, $\cos \varphi = 1$,	105°C	100x10 ³
UL 508	3				
PCJ	form A (NO)	5A,250VA	AC, general us	e, 85°C	6x10 ³
PCJ	form A (NO)	3A,250VA	AC, $\cos \varphi = 1$,	85°C	100x10 ³
PCJ	form A (NO)	3A,250VA	AC, $\cos \phi = 1$,	105°C	100x10 ³

Mechanical endurance



Coil Da	ata						
Coil volta	age range		3 to 24VDC				
Coil insu	lation system	according UL					
Stand	Standard Version:			class 105 (A)			
WG v	ersion:	ion: class 155 (F)					
Coil ver	Coil versions, DC coil						
Coil	Rated	Rated Operate		Coil	Rated coil		
code	voltage voltage		voltage	resistance	power		
	VDC	VDC	VDC	Ω±10%	mW		
03	3	2.25	0.15	45	200		
05	4	3.75	0.25	125	200		
06	6	4.50	0.3	180	200		
09	9	6.75	0.45	405	200		
12	12	9.00	0.6	720	200		
18	18	13.50	0.9	1620	200		

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

1.2

18.00

24

24



Insulation Data Initial dielectric strength between open contacts $750V_{rms}$ between contact and coil $4000V_{rms}$ Initial surge withstand voltage between contact and coil $10000V_{rms}$ Initial insulation resistance $1000M\Omega$ Clearance/creepage $1000M\Omega$ between contact and coil $\geq 7.5/8mm$

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

>10x10⁶ operations

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

Datasheets, product data, 'Definitions' section, application notes and all specifications are subject to change. 1



Miniature PCB Relay PCJ (Continued)

Other Data

Material compliance: EU RoHS/ELV,	China RoHS, REACH, Halogen content		
refer to the Product Compliance Support Center			
www.te.co	m/customersupport/rohssupportcenter		
Ambient temperature	-40 to 85°C (105°C)		
Category of environmental protection	1		
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	4g		
Resistance to soldering heat THT			
IEC 60068-2-20	260°C/5s		
Packaging/unit	box/1000 pcs.		

PCB layout / terminal assignment Bottom view on solder pins





S=511-AA

S0511-AB

Dimensions



Product code structure PCJ 12 D 3 301 1 Μ Typical product code Туре PCJ Miniature PCB Relay PCJ Version Single contact Coil Coil code: please refer to coil versions table Coil power D Standard 200mW Contact material 3 AgNi Contact arrangement M 1 form A (NO) contact Sealing Blank Flux proof Wash tight* н Suffix 301 Standard version WG Product in accordance with IEC 60335-1 (domestic appliances)*

*) Wash tight WG version on request

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Miniature PCB Relay PCJ (Continued)

Product code	Version	Contact	Cont. material	Coil version	Coil	Sealing	Part number
PCJ-103D3M,301	ЗA	1 form A (NO)	AgNi	200mW	3VDC	Flux proof	1721081-1
PCJ-105D3M,301					5VDC		1721081-2
PCJ-106D3M,301					6VDC		1721081-3
PCJ-109D3M,301					9VDC		1721081-4
PCJ-112D3M,301					12VDC		1721081-5
PCJ-124D3M,301					24VDC		1721081-7
PCJ-103D3MH,301					3VDC	Wash tight	1721081-8
PCJ-105D3MH,301					5VDC		1721081-9
PCJ-106D3MH,301					6VDC		1-1721081-0
PCJ-109D3MH,301					9VDC		1-1721081-1
PCJ-112D3MH,301					12VDC		1-1721081-2
PCJ-124D3MH,301					24VDC		1-1721081-4
PCJ-103D3M-WG	5A				3VDC	Flux proof	1721547-1
PCJ-105D3M-WG					5VDC		1721547-2
PCJ-106D3M-WG					6VDC		1721547-3
PCJ-109D3M-WG					9VDC		1721547-4
PCJ-112D3M-WG					12VDC		1721547-5
PCJ-124D3M-WG					24VDC		1721547-7
PCJ-103D3MH-WG					3VDC	Wash tight	1721547-8
PCJ-105D3MH-WG					5VDC	-	1721547-9
PCJ-106D3MH-WG					6VDC		1-1721547-0
PCJ-109D3MH-WG					9VDC		1-1721547-1
PCJ-112D3MH-WG					12VDC		1-1721547-2
PC-I-124D3MH-WG					24VDC		1-1721547-4

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TE Connectivity: <u>1721081-5</u>