

**Miniature PCB Relay PCJ**

- 1 pole 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

Typical applications  
Home appliances



**Approvals**

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

**Contact Data**

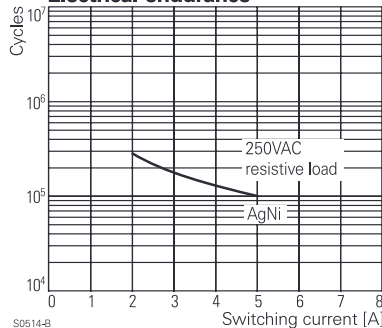
Contact arrangement	1 form A (NO)
Rated voltage	250VAC
Max. switching voltage	30VDC, 250VAC
Rated current	3A/5A
Switching power	1,250VA, 150W
Contact material	AgNi
Min. recommended contact load	100mA, 5VDC
Initial contact resistance	100mΩ at 1A, 6VDC
Frequency of operation, with/without load	1800/18000h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

**Contact ratings**

Type	Contact	Load	Cycles
<b>IEC 61810</b>			
PCJ	form A (NO)	5A,250VAC, cosφ=1, 85°C	100x10 <sup>3</sup>
PCJ	form A (NO)	2A,250VAC, cosφ=0.6 85°C	100x10 <sup>3</sup>
PCJ	form A (NO)	3A,250VAC, cosφ=1, 105°C	100x10 <sup>3</sup>
<b>UL 508</b>			
PCJ	form A (NO)	5A,250VAC, general use, 85°C	6x10 <sup>3</sup>
PCJ	form A (NO)	3A,250VAC, cosφ=1, 85°C	100x10 <sup>3</sup>
PCJ	form A (NO)	3A,250VAC, cosφ=1, 105°C	100x10 <sup>3</sup>

Mechanical endurance >10x10<sup>6</sup> operations

**Electrical endurance**



**Coil Data**

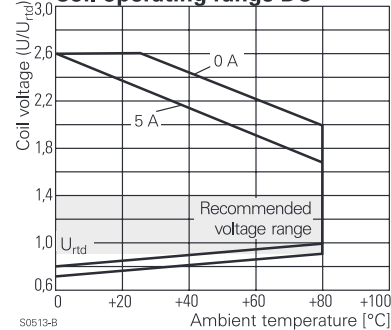
Coil voltage range	3 to 24VDC
Coil insulation system according UL	
Standard Version:	class 105 (A)
WG version:	class 155 (F)

**Coil versions, DC coil**

Coil code	Rated voltage VDC	Operate voltage VDC	Release voltage VDC	Coil resistance Ω±10%	Rated coil power 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
24	24	18.00	1.2	2880	200

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

**Coil operating range DC**



**Insulation Data**

Initial dielectric strength	
between open contacts	750V <sub>rms</sub>
between contact and coil	4000V <sub>rms</sub>
Initial surge withstand voltage	
between contact and coil	10000V <sub>rms</sub>
Initial insulation resistance	1000MΩ
Clearance/creepage	
between contact and coil	≥ 7.5/8mm

**Miniature PCB Relay PCJ** (Continued)

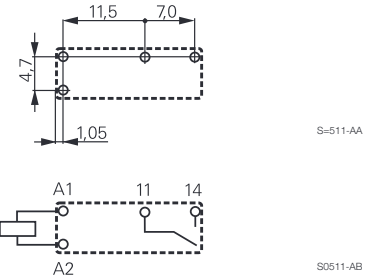
**Other Data**

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)

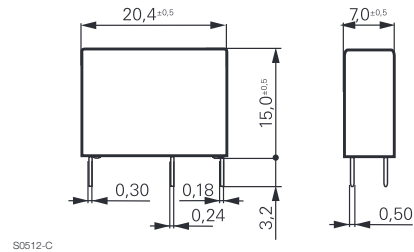
Ambient temperature	-40 to 85°C (105°C)
Category of environmental protection IEC 61810	RTII - flux proof, RTIII - wash tight
Vibration resistance (functional)	10 to 50Hz, 1.5mm double amplitude
Shock resistance (functional) IEC 60068-2-27 (half sine)	98m/s <sup>2</sup> , 11ms
Terminal type	PCB-THT
Weight	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



**Dimensions**



**Product code structure**

Typical product code **PCJ 1 12 D 3 M 301**

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

\*) Wash tight WG version on request

**Miniature PCB Relay PCJ** (Continued)

Product code	Version	Contact	Cont. material	Coil version	Coil	Sealing	Part number										
PCJ-103D3M,301	3A	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					5A					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										
PCJ-124D3MH-WG					24VDC		1-1721547-4										