

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



F0278-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 ⁻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

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

Mechanical endurance >10x10⁶ operations

Coil Data

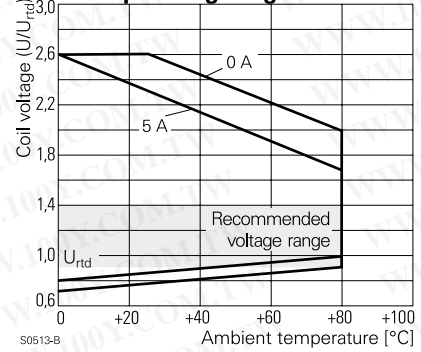
Coil voltage range	3 to 24VDC
Coil insulation system according UL	
3A version:	class 105 (A)
5A version:	class 155 (F)

Coil versions, DC coil

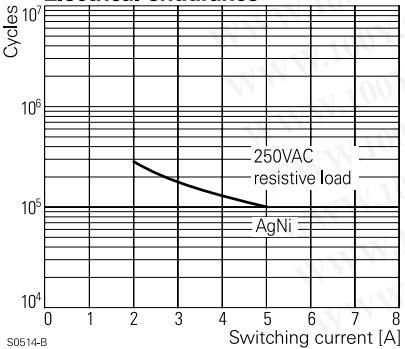
Coil code	Rated voltage VDC	Operate voltage VDC	Release voltage VDC	Coil resistance Ω±10%	Rated coil power mW
03	3	2.25	0.15	45	200
05	4	3.75	0.25	125	200
06	6	4.50	0.3	180	200
09	9	6.75	0.45	405	200
12	12	9.00	0.6	720	200
24	24	18.00	1.2	2880	200

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

Coil operating range DC



Electrical endurance



Insulation Data

Initial dielectric strength	
between open contacts	750V _{rms}
between contact and coil	4000V _{rms}
Initial surge withstand voltage	
between contact and coil	7000V
Initial insulation resistance	1000MΩ
Clearance/creepage	
between contact and coil	≥ 5.5/8mm

Miniature PCB Relay PCJ (Continued)

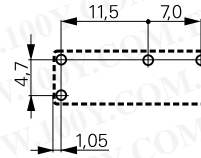
Other Data

Material compliance: EU RoHS/ELV, China RoHS, REACH, Halogen content refer to the Product Compliance Support Center at www.tycoelectronics.com/customersupport/rohssupportcenter

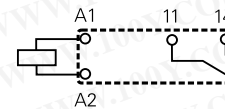
Ambient temperature	-40 to 85°C (105°C)
Category of environmental protection	IEC 61810
Vibration resistance (functional)	10 to 50Hz, 1.5mm double amplitude
Shock resistance (functional)	RTII - flux proof, RTIII - wash tight
IEC 60068-2-27 (half sine)	98m/s ² , 11ms
Terminal type	PCB-THT
Weight	4g
Resistance 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

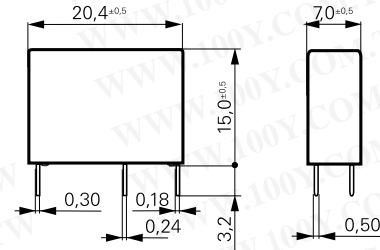


S-511-AA



S0511-AB

Dimensions



S0512-C

勝特力材料 886-3-5753170
 勝特力电子(上海) 86-21-34970699
 勝特力电子(深圳) 86-755-83298787
[Http://www.100y.com.tw](http://www.100y.com.tw)

Product code structure

Typical product code

PCJ 1 12 D 3 M 301

Type	PCJ Miniature PCB Relay PCJ
Version	1 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 H Wash tight*
Suffix	301 Standard version WG 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		
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						3VDC	
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							
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					

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