

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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Slimline PCB Relay PCN

- 1 pole 3 A, 1 form A (NO) contact
- Only 5mm wide
- 3A switching current, load range 1mA up to 5A
- Sensitive coil 120mW
- Allows high function-/packing density
- **■** Cadmium-free contacts
- Z type with reinforced insulation
- RoHS compliant (Directive 2002/95/EC)

Typical applications

PLC, temperature control, I/O modules.

Approvals	
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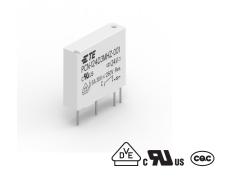
VDE REG.-Nr.40001589, UL E82292, CQC 08001026045

Technical data of approved types on request.

Contact Data	
Contact arrangement	1 from A (NO)
Rated voltage	250VAC/30VDC
Max. switching voltage	277VAC/125VDC
Rated current	3A/5A
Limiting continuous current	3A/5A
Breaking capacity max.	750VA (3A), 1250VA(5A)
Contact material	AgNi, gold plated
Contact style	bifurcated contact
Min. recommended contact load (reference	ce) 5VDC,100mA
Initial contact resistance	30mΩ at 100mA, 6VDC
Frequency of operation, with/without load	10/300min ⁻¹
Electrical endurance	
3A, 250VAC, resistive, +70°C	100x10 ³ ops.
5A, 250VAC, resistive, +85°C	30x10 ³ ops.
Contact ratings	

5A, 250VAC, resistive, +85°C	30x10 ³ ops.
Contact ratings	
Load	Cycles
IEC 61810	
$3A,250VAC, \cos \varphi = 1, +70^{\circ}C$	100x10 ³
3A/30VDC, L/R=0ms, +70°C	100x10 ³
5A, 250VAC, cosφ=1, +85°C	30x10 ³
5A 30VDC, L/R=0ms, +85°C	70x10 ³
UL 508	
3A, 250VAC, resistive, +25°C	100x10 ³
Pilot duty, B300, +25°C	6x10 ³
Pilot duty, R300, +25°C	6x10 ³
9A LRA, 1.5A FLA, 240VAC, +45°C	30x10 ³

Mechanical endurance, DC coil >10x10⁶ operations

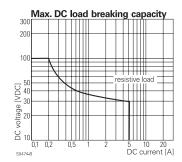


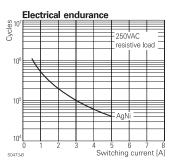
Coil Data	
Coil voltage range	3 to 24VDC
Operative range, IEC 61810	1
Coil insulation system according UL	Class A
	Class F type available upon request

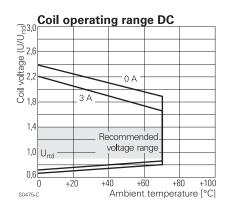
Standard D coil version (120mW), DC coil									
Coil	Rated	Operate	Release	Coil	Rated coil				
code	voltage	voltage	voltage	resistance	power				
	VDC	VDC	VDC	Ω±10%	mW				
03	3	2.1	0.3	75	120				
04	4.5	3.15	0.45	169	120				
05	5	3.5	0.5	208	120				
06	6	4.2	0.6	300	120				
09	9	6.3	0.9	675	120				
12	12	8.4	1.2	1200	120				
18	18	12.6	1.8	2700	120				
23	23.5	16.45	2.35	4602	120				
24	24	16.8	2.4	4800	120				

Standard L coil version (100mW), DC coil								
Coil	Rated	Operate	Release	Coil	Rated coil			
code	voltage	voltage	voltage	resistance	power			
	VDC	VDC	VDC	Ω±10%	mW			
03	3	2.1	0.3	90	100			
04	4.5	3.15	0.45	202	100			
05	5	3.5	0.5	250	100			
06	6	4.2	0.6	360	100			
09	9	6.3	0.9	810	100			
12	12	8.4	1.2	1440	100			
18	18	12.6	1.8	3240	100			
23	23.5	16.45	2.35	5522	100			
24	24	16.8	2.4	5760	100			

All figures are given for coil without pre-energization, at ambient temperature $+23^{\circ}\text{C}$.









Slimline PCB Relay PCN (Continued)

Insulation Data	
Initial dielectric strength	
between open contacts	750V _{ms}
between contact and coil	3000V _{ms}
Initial surge withstand voltage	***************************************
between contact and coil	4000V
Clearance/creepage	
between contact and coil	>3.5mm
Tracking index of relay base	PTI600

Other Data

Packaging/unit

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

Ambient temperature -40 to 85°C

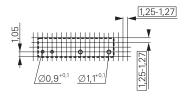
Category of environmental protection

RTIII - wash tight IEC 61810 Vibration resistance (functional) 10 to 55Hz, 1.5mm Vibration resistance (destructive) 10 to 55Hz, 1.5mm Shock resistance (functional) min. 98m/s², 11ms min. 980m/s², 6ms IEC 60068-2-27 (half sine) Shock resistance (destructive) Terminal type PCB-THT Resistance to soldering heat THT IEC 60068-2-20 260°C/5s

box/2000 pcs.

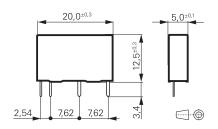
PCB layout / terminal assignment

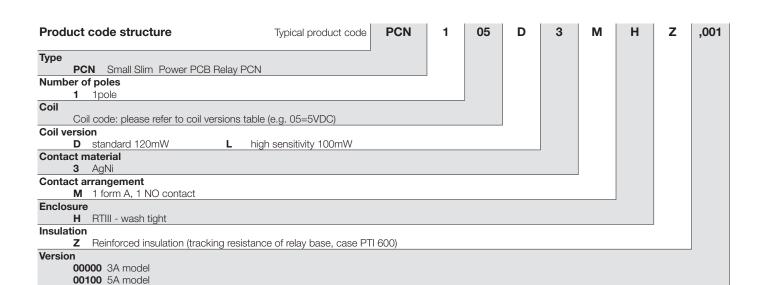
Bottom view on solder pins





Dimensions





Product code	Contact	Coil voltage	Coil	Cont. material	Enclosure	Rating	Part number
PCN-105D3MHZ,000	1-pole	5VDC	120mW	AgNi	RTIII - wash tight	3A	3-1461491-0
PCN-106D3MHZ,000		6VDC					3-1461491-1
PCN-112D3MHZ,000		12VDC					3-1461491-3
PCN-124D3MHZ,000		24VDC					3-1461491-6
PCN-124D3MHZ,001						5A	3-1461491-8 All

Note: This list represents the most common types and does not show all variants covered by this datasheet, other types on request.