

Miniature PCB Relay PCD/F

- 10A and 15A contact rating
- 1 form A (NO) contact arrangement
- Quick connect terminals available(PCDF)

Typical applications
Appliances, HVAC, office machines



F0154-D



Approvals

cULus E82292, TUV R50138791, CQC 03001008474
Technical data of approved types on request

Contact Data

Contact arrangement	1 Form A (NO)
Rated voltage	250VAC
Max. switching voltage	250VAC
Rated current	10A
Contact material	AgCdO, AgSnO, AgNi
Min. recommended contact load	100mA at 5VDC
Frequency of operation	1200 ops./h
Operate/release time max.	15/8ms
Contact ratings	10A

Contact ratings

Type	Contact	Load	Cycles
UL 508			
PCD-1...D2M(H)	A (NO)	10A, 250VAC, resistive, 85°C	50x10 ³
PCD-1...D2M(H)	A (NO)	15A, 125VAC, resistive, 23°C	100x10 ³
Mechanical endurance, DC coil		10x10 ⁶ operations	

Coil Data

Coil voltage range	3 to 48VDC
Operative range, IEC 61810	2
Coil insulation system according UL	Class F

Coil Data (continued)

Coil versions, DC coil

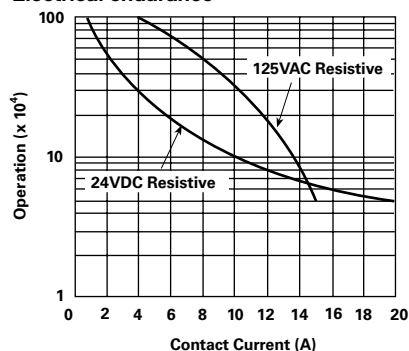
Coil code	Rated voltage VDC	Operate voltage VDC	Release voltage VDC	Coil resistance $\Omega \pm 10\%$	Rated coil power mW
03	3	2.25	0.15	45	200
05	5	3.75	0.25	125	200
06	6	4.50	0.3	180	200
09	9	6.75	0.45	405	200
12	12	9.00	0.6	720	200
18	18	13.50	0.9	1620	200
24	24	18.00	1.2	2880	200
48	48	36.00	2.4	9200	250

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

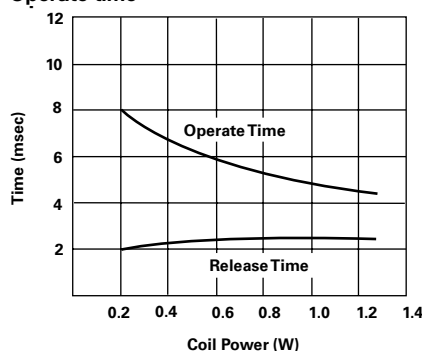
Insulation Data

Initial dielectric strength	
between open contacts	750V _{rms}
between contact and coil	2500V _{rms}
Clearance/creepage	
between contact and coil	>1.6/3.2mm

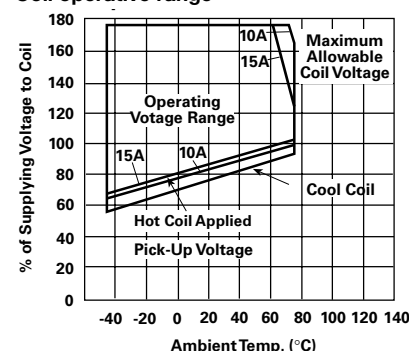
Electrical endurance



Operate time



Coil operative range



Miniature PCB Relay PCD/F (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	
AgCdO/AgNi contacts	-30°C to +70°C
AgSnO ₂ contacts	-30°C to +85°C
Category of environmental protection	
IEC 61810	RTII - flux proof RTIII - wash tight
Shock resistance (functional)	10g
Shock resistance (destructive)	100g

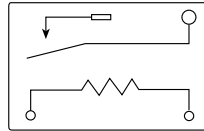
Other Data (continued)

Weight	
PCD	9g
PCDF	10g
Resistance to soldering heat THT, IEC 60068-2-20	
RTII	270°C/10s
RTIII	260°C/5s
Packaging unit	1000 pcs.

PCD version

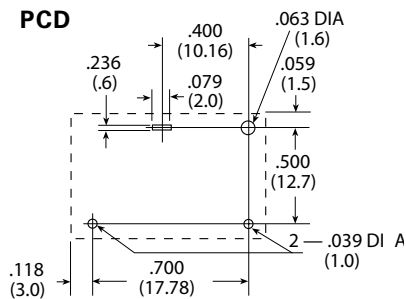
Terminal assignment

Bottom view on solder pins

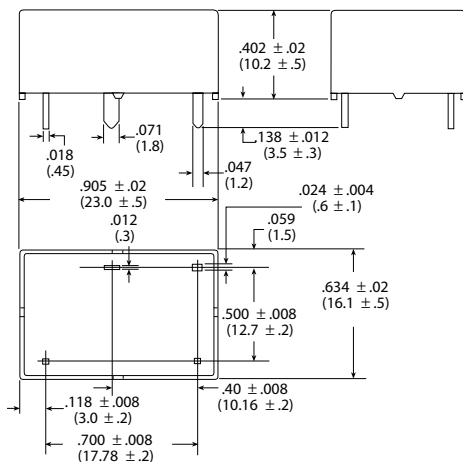


PCB layout

Bottom view on solder pins



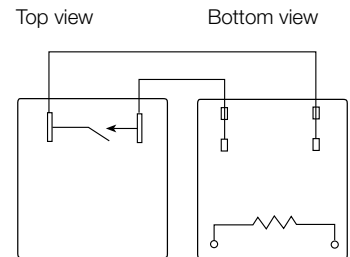
Dimensions



PCDF version

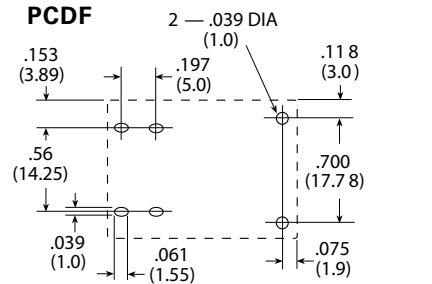
Terminal assignment

Bottom view on solder pins

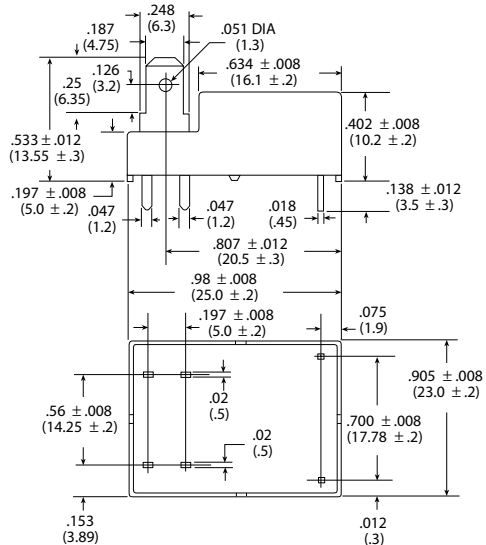


PCB layout

Bottom view on solder pins



Dimensions



Miniature PCB Relay PCD/F (Continued)

Product code structure		Typical product code		PCD	-1	12	D	1	M	H	,000
Type											
PCD		Miniature PCB Relay PCD									
Terminals											
Blank		PC board terminals									
F		Quick connect terminals									
Number of poles											
1		1 pole									
Coil voltage											
		Coil code: please refer to coil versions table (e.g. 05=5VDC)									
Coil input											
D		standard									
Contact material											
1		AgCdO		2	AgSnO		3	AgNi			
Contact arrangement											
M		1 form A (NO)									
Enclosure											
Blank		Flux proof plastic case		H	Sealed plastic case with knock-off nib for ventilation						
Terminal construction											
,000		Standard model		Other	Customized model						

Product code	Coil voltage	Cont. material	Arrangement	Enclosure	Terminals	Part number
PCD-105D1M,000	5VDC	AgCdO	1 form A (NO)	Flux proof	PCB	3-1419126-4
PCD-105D1MH,000				Wash tight		3-1419126-6
PCD-105D2M,000		AgSnO		Flux proof		1721105-1
PCD-112D1M,000	12VDC	AgCdO				4-1419126-0
PCD-112D1MH,000				Wash tight		4-1419126-2
PCD-112D2M,000		AgSnO		Flux proof		1721105-4
PCD-112D2MH,000				Wash tight		1-1721105-0
PCD-124D1M,000	24VDC	AgCdO		Flux proof		4-1419126-4
PCD-124D1M,010						4-1419126-6
PCD-124D1MH,000				Wash tight		4-1419126-8
PCD-124D2M,000		AgSnO		Flux proof		1721105-5
PCD-124D2M,010						1721411-5
PCD-124D2MH,000				Wash tight		1-1721105-1
PCD-148D1M,000	48VDC	AgCdO		Flux proof		5-1419126-1
PCD-148D1MH,000				Wash tight		1419146-7
PCD-148D2M,000		AgSnO		Flux proof		1721105-6
PCDF-112D2M,000	12VDC				PCB+QC	1721106-4