

Miniature PCB Relay T7C

- Up to 12A switching capacity
- UL Class F coil insulation system
- 1 form A (NO) and 1 Form C (CO) contact arrangement



Typical applications
Appliances, HVAC, office machines

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Approvals

UL E22575, TUV R50140298
Technical data of approved types on request

Contact Data

Contact arrangement	1 form A (NO), 1 form C (CO)
Rated voltage	240VAC, 24VDC
Max. switching voltage	240VAC, 24VDC
Rated current	10A
Contact material	AgCdO, Ag
Min. recommended contact load	100mA at 5VDC
Frequency of operation	360 ops./h
Operate/release time max.	10/5ms
Electrical endurance	10A 240VAC / 24VDC res, -30 to +85°C, 600ops/hr 100x10 ³ ops.
Contact ratings	10A
Mechanical endurance, DC coil	5x10 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

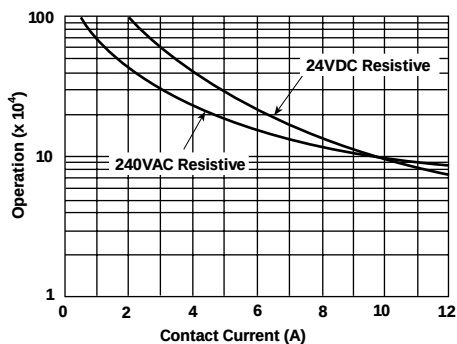
Coil code	Rated voltage VDC	Operate voltage VDC	Release voltage VDC	Coil resistance $\Omega \pm 10\%$	Rated coil power mW
03	3	2.25	0.15	25	360
05	5	3.75	0.25	69.4	360
06	6	4.5	0.3	100	360
09	9	6.75	0.45	225	360
12	12	9.0	0.6	400	360
24	24	18.0	1.2	1600	360
48	48	36.0	2.4	4517	510

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

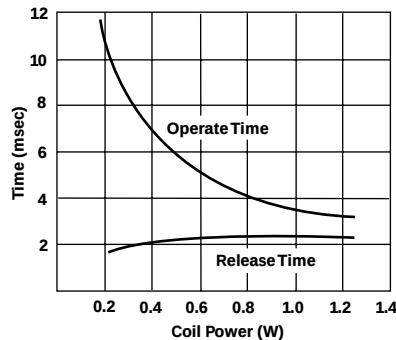
Insulation Data

Initial dielectric strength	
between open contacts	750V _{rms}
between contact and coil	1500V _{rms}
Clearance/creepage	
between contact and coil	>1.6/3.2mm

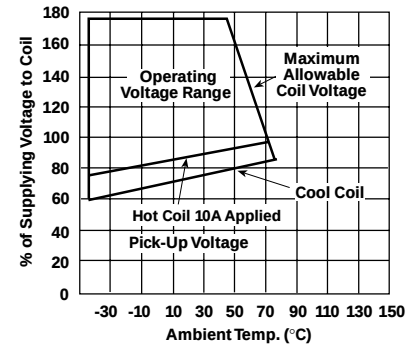
Electrical endurance



Operate time



Coil operative range



Miniature PCB Relay T7C (Continued)

Other Data

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 -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

Weight 12g

Resistance to soldering heat THT
IEC 60068-2-20

RTII: 270°C/10s
RTIII: 260°C/5s

Packaging unit tube/40 pcs., carton box/1000 pcs.

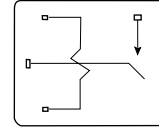
Accessories

Product Code	Description
27E1064	Socket, rated 10A at 300VAC. UL Recognized for US and Canada. Designed to fit same suggested board layout as relay.
20C430	Spring is designed to secure T7C relay in 27E1064 socket.

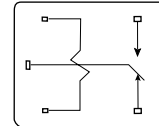
Terminal assignment

Bottom view on solder pins

1 form A (NO)



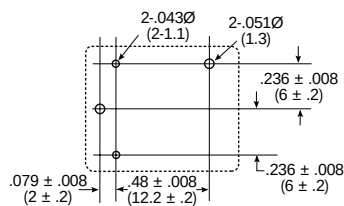
1 form C (CO)



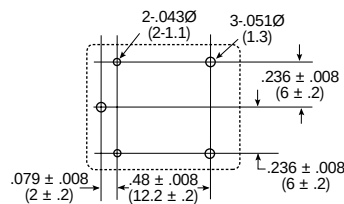
PCB layout

Bottom view on solder pins

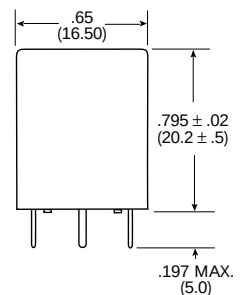
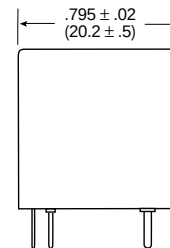
1 form A (NO)



1 form C (CO)



Dimensions



Movable contact terminal:

.012x.039 (0.3x1.0)

Stationary contact terminals:

.012x.039 (0.3x1.0)

Coil terminals:

.022x.022 (.56x.56)

Miniature PCB Relay T7C (Continued)

Product code structure

Typical product code **T7C V 5 D 2 -24**

Type

T7C Miniature PCB Relay T7C

Enclosure

V Flux proof

S Wash tight, immersion cleanable case with knock-off nib

Contact arrangement

1 1 form A (NO) contact **5** 1 form C (CO) contact

Coil input

D DC coil

Contact material

Blank AgCdO **2** Ag

Coil voltage

Coil code: please refer to coil versions table (e.g. 05=5VDC)

Other types on request

Product code	Enclosure	Cont.arrangement	Coil input	Contact material	Coil voltage	Part number
T7CS1D-05	Wash tight	1 form A (NO)	DC coil	AgCdO	5VDC	1393190-7
T7CS1D-12					12VDC	1-1393190-0
T7CS1D-24					24VDC	1-1393190-2
T7CS1D2-05				Ag	5VDC	1-1393190-4
T7CS1D2-09					9VDC	1-1440006-1
T7CS1D2-12					12VDC	1-1393190-5
T7CS1D2-24					24VDC	1-1393190-6
T7CS5D-05		1 form C (CO)		AgCdO	5VDC	1-1393190-8
T7CS5D-09					9VDC	2-1393190-0
T7CS5D-12					12VDC	2-1393190-2
T7CS5D-24					24VDC	2-1393190-8
T7CS5D-48					48VDC	3-1393190-1
T7CV1D-24	Flux proof	1 form A (NO)			24VDC	4-1393190-3
T7CV5D-05		1 form C (CO)			5VDC	4-1393190-6
T7CV5D-06					6VDC	4-1393190-7
T7CV5D-12					12VDC	5-1393190-3
T7CV5D-24					24VDC	6-1393190-0