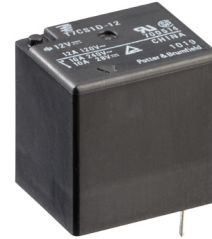


Miniature PCB Relay T7C

- 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



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

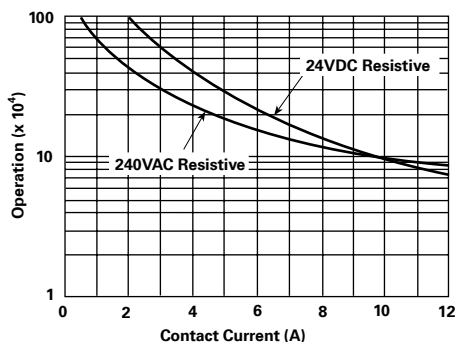
| Coil code | Rated voltage VDC | Operate voltage VDC | Release voltage VDC | Coil resistance $\Omega \pm 10\%$ | Rated coil power mW |
|-----------|-------------------|---------------------|---------------------|-----------------------------------|---------------------|
| 03 | 3 | 2.25 | 0.15 | 25 | 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.

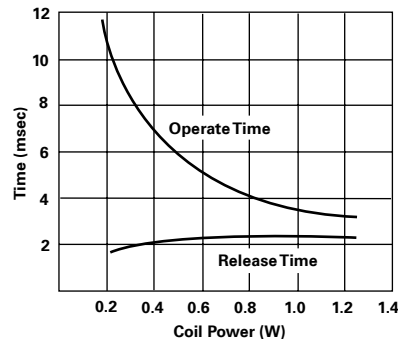
Insulation Data

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

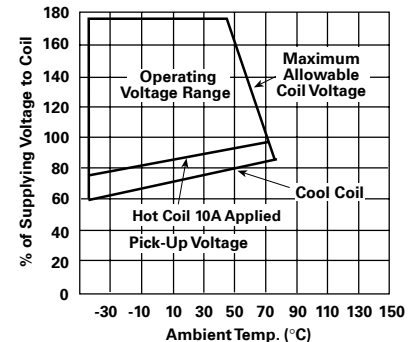
Electrical endurance



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.

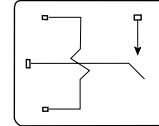
Accessories

| 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. |

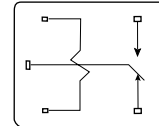
Terminal assignment

Bottom view on solder pins

1 form A (NO)



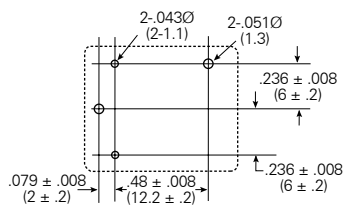
1 form C (CO)



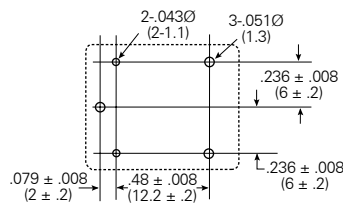
PCB layout

Bottom view on solder pins

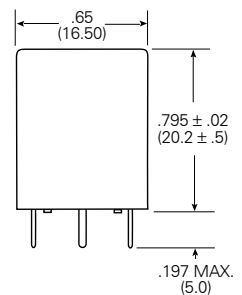
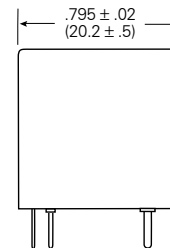
1 form A (NO)



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 |