

**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 <sup>3</sup> ops.
Contact ratings	10A
Mechanical endurance, DC coil	5x10 <sup>6</sup> 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**

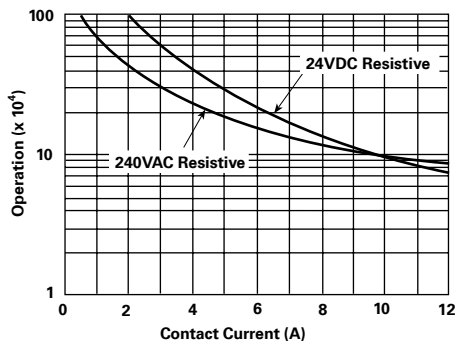
Coil code	Rated voltage VDC	Operate voltage VDC	Release voltage VDC	Coil resistance Ω±10%	Rated coil power mW
03	3	2.25	0.15	25	360
05	5	3.75	0.25	69.4	360
06	6	4.5	0.3	100	360
09	9	6.75	0.45	225	360
12	12	9.0	0.6	400	360
24	24	18.0	1.2	1600	360
48	48	36.0	2.4	4517	510

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

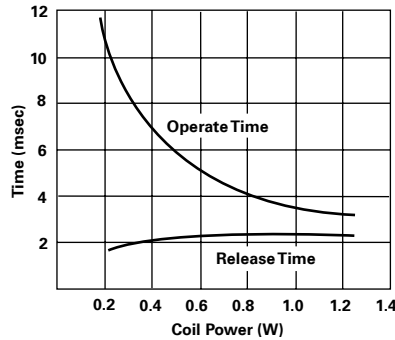
**Insulation Data**

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

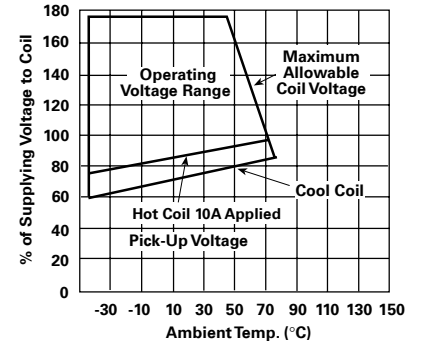
**Electrical endurance**



**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 <a href="http://www.te.com/customersupport/rohssupportcenter">www.te.com/customersupport/rohssupportcenter</a>	
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.

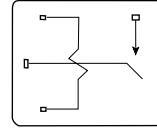
**Accessories**

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.

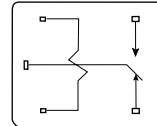
**Terminal assignment**

Bottom view on solder pins

1 form A (NO)



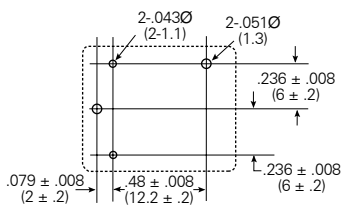
1 form C (CO)



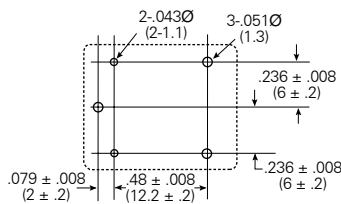
**PCB layout**

Bottom view on solder pins

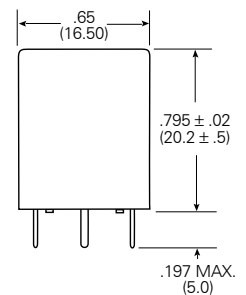
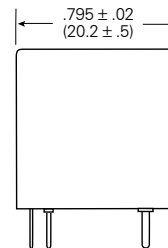
1 form A (NO)



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)

<b>Product code structure</b>	Typical product code	<b>T7C</b>	<b>V</b>	<b>5</b>	<b>D</b>	<b>2</b>	<b>-24</b>
<b>Type</b>	<b>T7C</b> Miniature PCB Relay T7C						
<b>Enclosure</b>	<b>V</b> Flux proof <b>S</b> Wash tight, immersion cleanable case with knock-off nib						
<b>Contact arrangement</b>	<b>1</b> 1 form A (NO) contact <b>5</b> 1 form C (CO) contact						
<b>Coil input</b>	<b>D</b> DC coil						
<b>Contact material</b>	<b>Blank</b> AgCdO <b>2</b> Ag						
<b>Coil voltage</b>	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	1 form C (CO)	AgCdO	DC coil	AgCdO	24VDC	1-1393190-6	
T7CS5D-05					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)	DC coil	AgCdO	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			5-1393190-3		
					6-1393190-0		