

### **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	

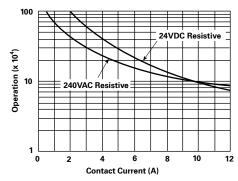
## Coil data (continued)

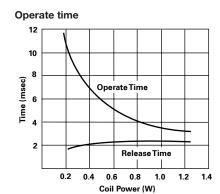
Coil vers	sions, DC co	il			
Coil	Rated	Operate	Release	Coil	Rated coil
code	voltage	voltage	voltage	resistance	power
	VDC	VDC	VDC	$\Omega \pm 10\%$	mW
03	3	2.25	0.15	25	360
05	5	3.75	0.25	69.4	360
06	6	4.5	0.3	100	360
09	9	6.75	0.45	225	360
12	12	9.0	0.6	400	360
24	24	18.0	1.2	1600	360
48	48	36.0	2.4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

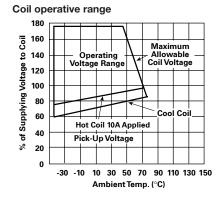
All figures are given for coil without pre-energization, at ambient temperature +23°C.

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**









## 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
 RTII - flux proof

 IEC 61810
 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)



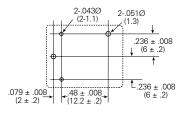
1 form C (CO)



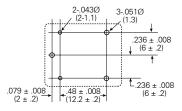
#### **PCB** layout

Bottom view on solder pins

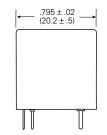
1 form A (NO)



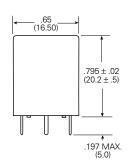
1 form C (CO)



#### **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				<i>'</i>			
1 1 form A (NO) contact 5 1 form C (CO) contact							
Coil input					'		
<b>D</b> 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	Ţ.	ì í			12VDC	1-1393190-0
T7CS1D-24					24VDC	1-1393190-2
T7CS1D2-05				Ag	5VDC	1-1393190-4
T7CS1D2-09				Ŭ	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

the 'Definitions' section, available at

http://relays.te.com/definitions