IOEC
In&Out Electronic Corp.

T3

►FEATURES
- Offers excellent board space savings
- Surge withstand voltage up to 1500V, meets FCC Part 68
- Low power consumption
- Monostable or bi-stable relays single and double coil magnet latching type available。
- Application for Telecommunication Equipment、Office Equipment、Security Alarm Systems、Measuring instruments、Medical Monitoring Equipment、Audio Visual Equipment、Flight Simulator、Sensor Control 。

14.0×9.0×5.0

►CONTACT DATA

Contact Arrangement		2C
Contact Material		AgPd + Au plated, AgNi + Au plated
Contact Rating (resistive)		1A/30VDC; 0.5A/125VAC
Max. Switching Power		30W/62.5VA
Min. Switching load		0.01mA/10mV
Max. Switching Voltage		110VDC/125VAC
Max. Switching Current		2A
Contact Resistance or Voltage drop		≤100m Ω
Operation life	Electrical	0.5A/125VAC： $1*10^5$
	Mechanical	10^8

►COIL PARAMETER

Single side stable Coil voltage (VDC) Rated	Max.	Coil resistance (Ω ±10%)	Pickup voltage(max) (VDC) (75%of rated voltage)	release voltage(min) (VDC) (10% of rated voltage)	Coil power consumption (W)	Operate Time (ms)	Release Time (ms)
1.5	2.25	16	1.13	0.15	0.14	≤3	≤3
2.4	3.6	41.3	1.8	0.24	0.14		
3	4.5	64.3	2.25	0.3	0.14		
4.5	6.7	145	3.38	0.45	0.14		
5	7.5	178	3.75	0.5	0.14		
6	9.0	257	4.50	0.6	0.14		
9	13.5	579	6.75	0.9	0.14		
12	18.0	1028	9.00	1.2	0.14		
24	36.0	2880	18.0	2.4	0.20		

1 Coil Latching Coil voltage (VDC) Rated	Max.	Coil resistance (Ω ±10%)	Set voltage(max) (VDC) (75%of rated voltage)	Reset voltage(max) (VDC) (10% of rated voltage)	Coil power consumption (W)	Operate Time (ms)	Release Time (ms)
1.5	2.25	22.5	1.13	1.13	0.10	≤3	≤3
2.4	3.6	58	1.8	1.8	0.10		
3	4.5	90	2.25	2.25	0.10		
4.5	6.7	203	3.38	3.38	0.10		
5	7.5	250	3.75	3.75	0.10		
6	9.0	360	4.50	4.50	0.10		
9	13.5	810	6.75	6.75	0.10		
12	18.0	1440	9.00	9.00	0.10		
24	36.0	3840	18.0	18.0	0.15		

2 Coils Latching		Coil resistance (Ω ±10%)	Set voltage(max) (VDC) (75%of rated voltage)	Reset voltage(max) (VDC) (10% of rated voltage)	Coil power consumption (W)	Operate Time (ms)	Release Time (ms)
Coil voltage (VDC)							
Rated	Max.						
1.5	2.25	11.3	1.13	1.13	0.20		
2.4	3.6	29	1.8	1.8	0.20		
3	4.5	45	2.25	2.25	0.20		
4.5	6.7	101	3.38	3.38	0.20		
5	7.5	125	3.75	3.75	0.20	≤3	≤3
6	9.0	180	4.50	4.50	0.20		
9	13.5	405	6.75	6.75	0.20		
12	18.0	720	9.00	9.00	0.20		
24	36.0	1920	18.0	18.0	0.30		

CAUTION: 1. The use of any coil voltage less than the rated coil voltage will compromise the operation of the relay.

2.Pickup and release voltage are for test purposes only and are not to be used as design criteria.

3.When latching relays are installed in equipment, the latch and reset coil should not be pulsed simultaneously. Coil should not be pulsed with less than the nominal coil voltage and pulse width should be a minimum of three times the specified operation time of the relay. If these conditions are not followed, it is possible for the relay to in be the magnetically neutral position.

►OPERATION CONDITION

Insulation Resistance	1000MΩ min (at 500VDC)
Dielectric Strength	
Between open Contacts	750VAC 1min
Between coil & Contacts	1000VAC 1min
Between Contact Sets	1000VAC 1min
Surge Withstand Voltage Between open Contacts	1500V
Shock resistance	Functional: 490m/s^2 Endurance: 980 m/s^2
Vibration resistance	10~55Hz Double amplitude:3mm
Solder ability	260℃±5℃ within 6s
Temperature Range	-40~70℃
Weight	Approx. 1.8g

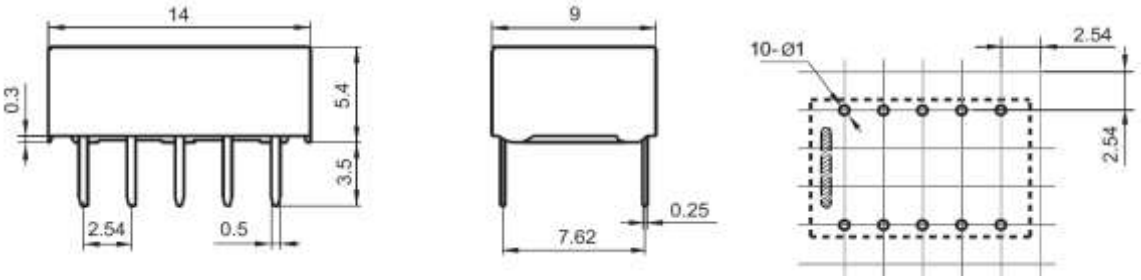
►ORDERING INFORMATION

		T3	-12D	L1	-G1	-R	(XXX)
Model	T3: Standard Dip version T3S: SMT version						
Coil Voltage	1.5, 2.4, 3, 4.5, 5, 6, 9, 12, 24 VDC						
Coil Sort	Nil: Single side stable L1: 1 coil latching L2: 2 coil latching						
Contact Material	Nil: AgNi+Gold plated G1: AgPd+Gold plated						
Packing Style	Nil: Tube packing R: Tape and reel packing (only for SMT type)						
Special Code	Nil: Standard XXX: Customer special requirement						

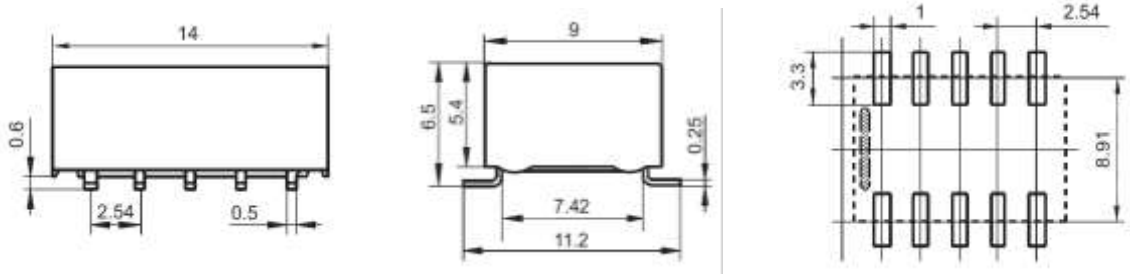
►DIMENSIONS (UNIT: mm)

Outline Dimensions **PCB Layout (Bottom views)**

T3 type:



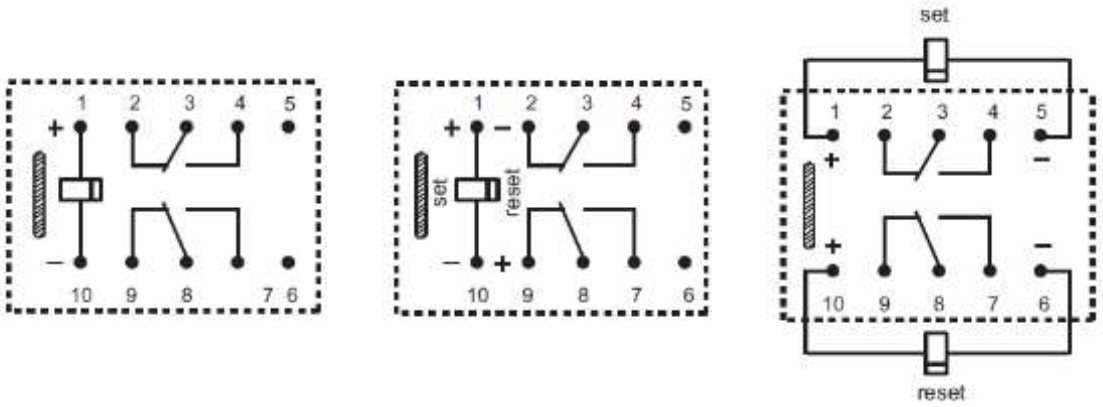
T3S Type



Remark: 1) In case of no tolerance shown in outline dimension: outline dimension ≦, tolerance should be ±0.2mm; outline dimension >1mm and ≦5mm, tolerance should be±0.3mm; outline dimension >5mm, tolerance should be ±0.4mm
2) The tolerance without indicating for PCB layout is always ±0.1mm.
3) The width of the gridding is 2.54mm.

Wiring Diagram (Bottom view)

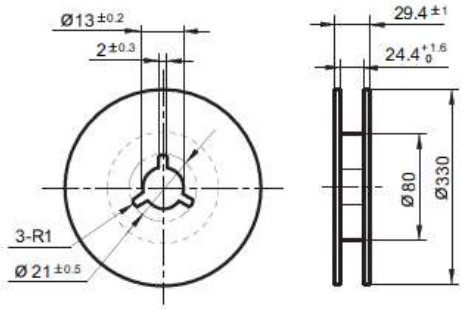
Single side stable **1 coil latching** **2 coil latching**



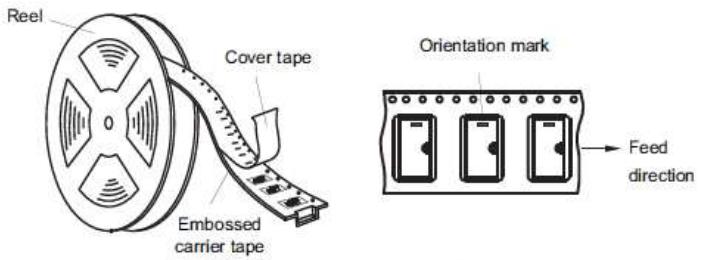
Deenergized condition **Reset condition** **Reset condition**

►TAPE &REEL PACKING CONSTRUCTION AND DIMENSION

Reel Dimensions



Direction of relay insertion



Notes: 1) Packing: 550pcs/reel, 4 reels/carton.
2) MOQ for reel packing is 550pcs.

Tape Dimensions