

#### **Features**

- Designed for thermostat, modem, computer peripherals, video recording and security applications.
- 1 Form C contact arrangement.
- · Low coil power requirement for IC compatibility.
- · Terminals arrangement on grid pattern.

#### Contact Data @ 20°C

Arrangements: 1 Form C (SPDT).

Material: Gold overlay Silver Nickel Alloy.

Max. Switching Rate: 300ops./ min. (no load).

30ops./ min. (rated load).

Expected Mechanical Life: 5 million ops (no load)

Expected Electrical Life: 100,000 ops (rated load)

Minimum Load: 1mA @ 1VDC:

Initial Contact Resistance: 50 milliohms @ 100mA, 6VDC.

#### **Contact Ratings**

Ratings: 1A @ 24VDC resistive. 1A @ 120VAC resistive. Max. Switched Voltage: AC: 120V

DC: 30V.

Max. Switched Current: 1A.

Max. Switched Power: 120VA, 24W.

## **Initial Dielectric Strength**

Between Open Contacts: 400VAC, 50/60 Hz. (1 min.). Between Contacts and Coil: 1,000VAC, 50/60 Hz. (1 min.).

Note: Consult factory for higher dielectric version: 1,500VAC, 50/60 Hz. (1 min.).

Surge Voltage Between Coil and Contacts: 1,500V FCC Part 68 (10/160μs).

## **Initial Insulation Resistance**

**Between Mutually Insulated Conductors:** 1,000Mohm @ 500VDCM.

#### **Coil Data**

Voltage: 5 to 24VDC.

Duty Cycle: Continuous.

Nominal Power: TSC-L: 150mW. TSC-D: 300mW.

Max. Coil Power: TSC-L: 140% of nominal at 70°C.

TSC-D: 115% of nominal at 70°C.

# TSC series

## Miniature, Sealed PC Board Relay

## Telecommunications, Appliances, Office Machines

**AU** UL File No. E82292 **©** CSA File No. LR48471

Users should thoroughly review the technical data before selecting a product part number. It is recommended that user also seek out the pertinent approvals files of the agencies/laboratories and review them to ensure the product meets the requirements for a given application.

#### Coil Data @ 20°C

TSC-L Sensitive					
Rated Coil Voltage (VDC)	Nominal Current (mA)	Coil Resistance (ohms) ± 10%	Must Operate Voltage (VDC)	Must Release Voltage (VDC)	
5	30.0	166	3.75	0.25	
6	25.0	240	4.50	0.30	
9	16.7	540	6.75	0.45	
12	12.5	960	9.00	0.60	
24	6.3	3,840	18.00	1.20	

#### TSC-D Standard

Rated Coil Voltage (VDC)	Nominal Current (mA)	Coil Resistance (ohms) ± 10%	Must Operate Voltage (VDC)	Must Release Voltage (VDC)		
5	60.0	83	3.75	0.25		
6	50.0	120	4.50	0.30		
9	33.4	270	6.75	0.45		
12	25.0	480	9.00	0.60		
24	12.5	1,920	18.00	1.20		

## Operate Data @ 20°C

Must Operate Voltage: 75% of nominal voltage or less Must Release Voltage: 5% of nominal voltage or more.

Operate Time: 5ms max. Release Time: 5ms max.

#### **Environmental Data**

Temperature Range: Operating: -40°C to +80°C

Vibration, Mechanical: 10 to 55Hz., 1.5mm double amplitude. Operational: 10 to 55Hz., 1.5mm double amplitude.

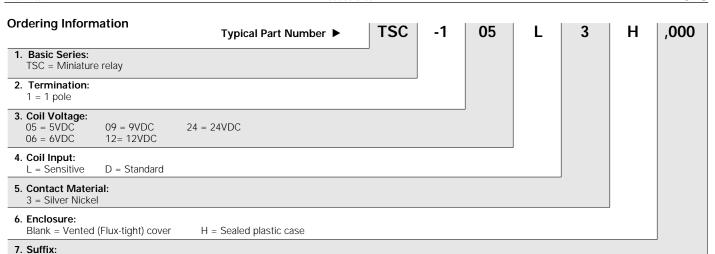
Shock, Mechanical: 500m/s² (50G approximately).
Operational: 100m/s² (10G approximately).
Operating Humidity: 45 to 85% RH. (Non-condensing)

## Mechanical Data

Termination: Printed circuit terminals. Enclosure: Plastic sealed case. Weight: 0.1 oz (3g) approximately.

Catalog 1308242 Electronics

Issued 3-03 **OEG** 



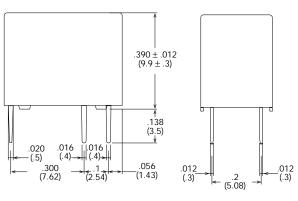
## Our authorized distributors are more likely to stock the following items for immediate delivery.

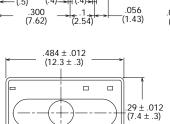
Other Suffix = Custom model

TSC-105L3H,000 TSC-124L3H,000 TSC-112D3H,000 TSC-112L3H,000 TSC-105D3H,000 TSC-124D3H,000

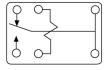
#### **Outline Dimensions**

,000 = Standard model

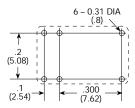




## Wiring Diagram (Bottom View)

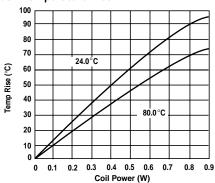


## PC Board Layout (Bottom View)



#### Reference Data

#### **Coil Temperature Rise**



#### Ambient Temp. & Operate Voltage

