

Signal PCB Relay TSC

- 1 pole, 1A, 1 form C (CO)
- 2.54mm terminal pitch same as I.C. socket terminal pitch

Typical applications
Telecommunications, office machine



Approvals

UL E82292, CSA LR48471-189
Technical data of approved types on request

Contact Data

| | |
|-------------------------------|-------------------------------|
| Contact arrangement | 1 form C (CO) |
| Rated voltage | 24VDC, 120VAC |
| Max. switching voltage | 30VDC, 120VAC |
| Rated current | 1A |
| Switching power | 120VA, 24W |
| Contact material | AgNi Alloy |
| Min. recommended contact load | 1mA at 1VDC |
| Initial contact resistance | 50mΩ at 100mA, 6VDC |
| Frequency of operation | 72000 ops/h |
| Operate/release time max. | 5/5ms |
| Electrical endurance | |
| 1A, 120VAC, resistive, | 100x10 ³ ops. |
| 1A, 24VDC, resistive, | 100x10 ³ ops. |
| Contact ratings | 1A, 120VAC/24VDC |
| Mechanical endurance | 10x10 ⁶ operations |

Coil Data

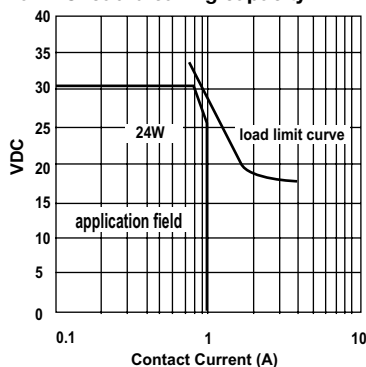
Coil voltage range 5 to 24VDC

Coil versions, DC coil

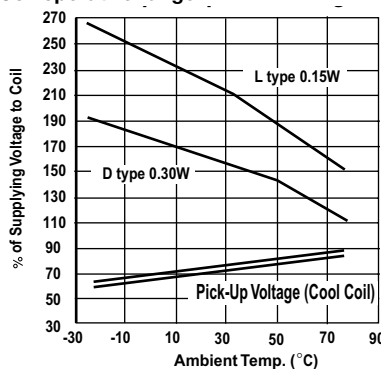
| Coil code | Rated voltage VDC | Operate voltage VDC | Release voltage VDC | Coil resistance Ω±10% | Rated coil power mW |
|-----------------------------|-------------------|---------------------|---------------------|-----------------------|---------------------|
| Standard coil, 300mW | | | | | |
| 05 | 5 | 3.75 | 0.25 | 83 | 300 |
| 06 | 6 | 4.5 | 0.3 | 120 | 300 |
| 09 | 9 | 6.75 | 0.45 | 270 | 300 |
| 12 | 12 | 9.0 | 0.6 | 480 | 300 |
| 24 | 24 | 18.0 | 1.2 | 1.920 | 300 |
| Sensitive coil 150mW | | | | | |
| 05 | 5 | 3.75 | 0.25 | 166 | 150 |
| 06 | 6 | 4.5 | 0.3 | 240 | 150 |
| 09 | 9 | 6.75 | 0.45 | 540 | 150 |
| 12 | 12 | 9.0 | 0.6 | 960 | 150 |
| 24 | 24 | 18.0 | 1.2 | 3840 | 150 |

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

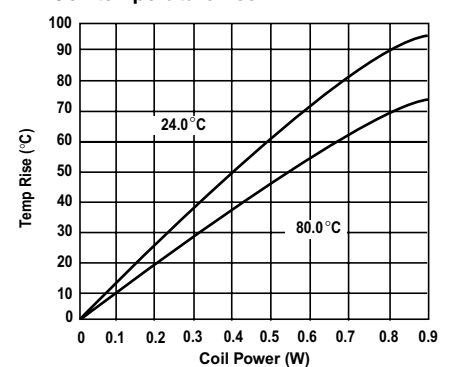
Max DC load breaking capacity



Coil operative range



Coil temperature rise



Insulation Data

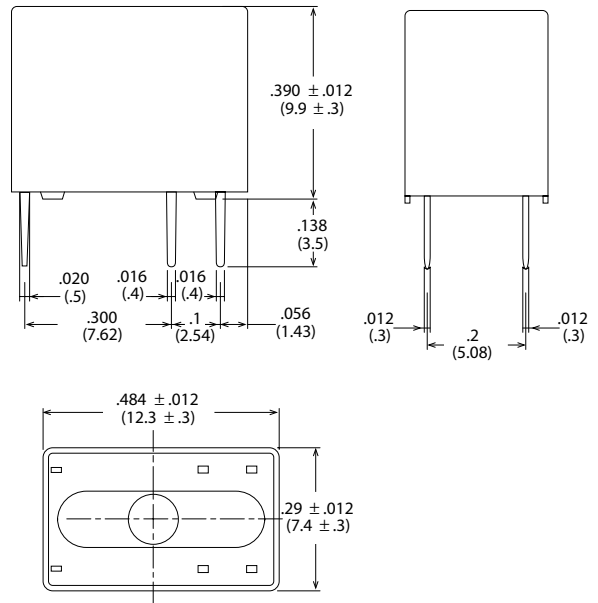
| | |
|---------------------------------|-----------------------|
| Initial dielectric strength | |
| between open contacts | 400V _{rms} |
| between contact and coil | 10000V _{rms} |
| Initial surge withstand voltage | |
| between contact and coil | 1500V (10/160μs) |
| Clearance/creepage | |
| between contact and coil | 2.0/1.5mm |

Signal PCB Relay TSC (Continued)

Other Data

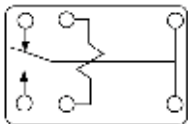
| | |
|---|--|
| Material compliance: EU RoHS/ELV, China RoHS, REACH, Halogen content refer to the Product Compliance Support Center at www.tycoelectronics.com/customersupport/rohssupportcenter | |
| Ambient temperature | -30 to 80°C |
| Category of environmental protection | IEC 61810 |
| | RTII - flux proof, RTIII - wash tight |
| Vibration resistance (functional) | 10 to 50Hz, 1.5mm double amplitude |
| Shock resistance (functional) | IEC 60068-2-27 (half sine) 98m/s ² , 11ms |
| Terminal type | PCB-THT |
| Weight | 3g |
| Resistance to soldering heat THT | IEC 60068-2-20 260°C/5s |
| Packaging/unit | tube/50 pcs., box/2000 pcs. |

Dimensions



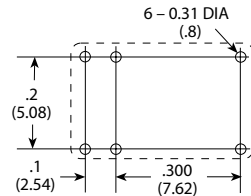
Terminal assignment

Bottom view on solder pins



PCB layout

Bottom view on solder pins



Product code structure

Typical product code **TSC -1 12 D 3 H ,000**

| | |
|-------------------------|--|
| Type | TSC Signal PCB Relay TSC |
| Pole | 1 1pole |
| Coil | Coil code: please refer to coil versions table |
| Coil power | D Standard 300mW L Sensitive 150mW |
| Contact material | 3 AgNi |
| Sealing | Blank Flux proof H Wash tight |
| Suffix | ,000 Standard |

| Product code | Version | Contact | Cont.material | Coil power | Coil voltage | Sealing | Part number |
|----------------|---------|---------------|---------------|------------|--------------|------------|-------------|
| TSC-105D3H,000 | 1A | 1 form C (CO) | AgNi Alloy | 300mW | 5VDC | Wash tight | 1-1419130-0 |
| TSC-112D3H,000 | | | | | 12VDC | | 2-1419130-1 |
| TSC-124D3H,000 | | | | | 24VDC | | 5-1440007-3 |
| TSC-105L3H,000 | | | | 150mW | 5VDC | Wash tight | 1-1419130-2 |
| TSC-112L3H,000 | | | | | 12VDC | | 2-1419130-4 |
| TSC-124L3H,000 | | | | | 24VDC | | 2-1419130-8 |