

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

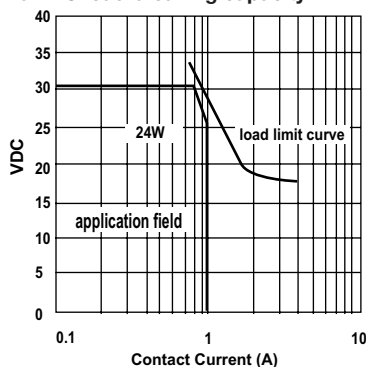
Coil voltage range 5 to 24VDC

Coil versions, DC coil

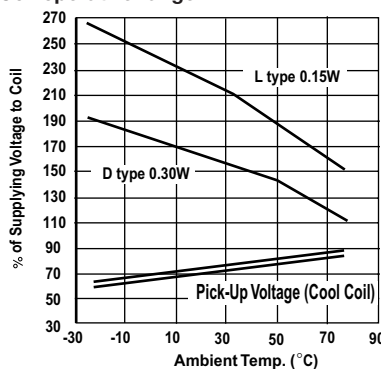
Coil code	Rated voltage VDC	Operate voltage VDC	Release voltage VDC	Coil resistance Ω±10%	Rated coil power mW
Standard coil, 300mW					
05	5	3.75	0.25	83	300
06	6	4.5	0.3	120	300
09	9	6.75	0.45	270	300
12	12	9.0	0.6	480	300
24	24	18.0	1.2	1.920	300
Sensitive coil 150mW					
05	5	3.75	0.25	166	150
06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

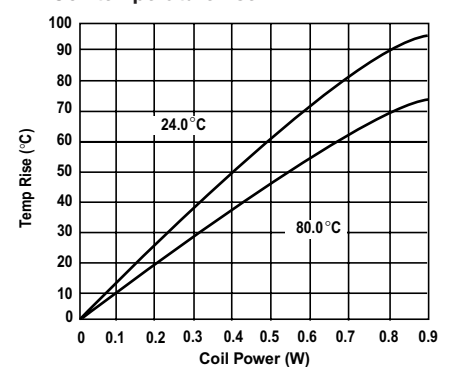
Max DC load breaking capacity



Coil operative range



Coil temperature rise



Insulation Data

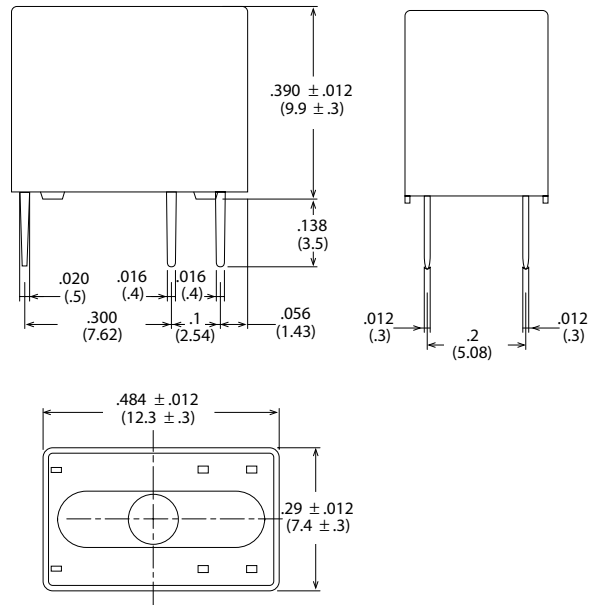
Initial dielectric strength	
between open contacts	400V _{rms}
between contact and coil	1000V _{rms}
Initial surge withstand voltage	
between contact and coil	1500V (10/160μs)
Clearance/creepage	
between contact and coil	2.0/1.5mm

Signal PCB Relay TSC (Continued)

Other Data

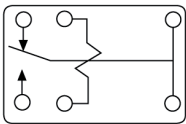
Material compliance: EU RoHS/ELV, China RoHS, REACH, Halogen content refer to the Product Compliance Support Center at www.tycoelectronics.com/customersupport/rohssupportcenter	
Ambient temperature	-30 to 80°C
Category of environmental protection	IEC 61810
	RTII - flux proof, RTIII - wash tight
Vibration 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



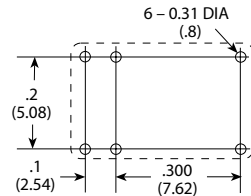
Terminal assignment

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