## Datasheet

DPDT Through Hole Mount Non-Latching Relay, 2 A, 5V

RS Stock 819-8981


Dimensions: (mm)


## General Data

- Operate time at VNOM typ./max. - $1 \mathrm{~ms} / 3 \mathrm{~ms}$
- Release time without parallel diode typ./max. - 1ms/3ms
- Release time with parallel diode typ./max. - $3 \mathrm{~ms} / 5 \mathrm{~ms}$
- Bounce time at closing contact typ./max. - $1 \mathrm{~ms} / 5 \mathrm{~ms}$
- Max. switching rate without load -50 operations/s
- Ambient temperature $--40^{\circ} \mathrm{C}$ to $+85^{\circ} \mathrm{C}$
- Thermal resistance - <150K/W
- Max. Permissible coil temperature $-125^{\circ} \mathrm{C}$
- Degree of protection / environmental - Immersion cleanable / IP67
- Mounting position - Any
- Minimum switching voltage $-100 \mu \mathrm{~V}$
- Initial contact resistance / measuring condition: $10 \mathrm{~mA} / 20 \mathrm{mV}<50 \mathrm{~m}$
- Thermoelectric potential $-<10 \mu \mathrm{~V}$


## Electrical endurance

- at contact application (<30mV/>10mA) min. $2.5 \times 106$ operations
- at $125 \mathrm{VDC} / 0.24 \mathrm{~A}-30 \mathrm{~W}$ min. $5 \times 105$ operations
- at $220 \mathrm{VDC} / 0.27 \mathrm{~A}-60 \mathrm{~W}$ min. $1 \times 10_{5}$ operations
- at $250 \mathrm{VAC} / 0.25 \mathrm{~A}-62.5 \mathrm{VA}$ min. $1 \times 105$ operations
- at 30VDC / 1A -30 W min. $5 \times 105$ operations
- at 30VDC / 2A -60 W min. $1 \times 105$ operation


## Insulation

- Insulation resistance at 500VDC $>109 \Omega$
- Dielectric test voltage
- between coil and contacts 1800 VRMS
- between adjacent contact sets 1000 VRMS
- between open contacts $1000 V R M S$
- Surge voltage resistance
- (according to Telcordia TR-NWT 001089 [2/10 $\mu \mathrm{s}$ ] according to EC60950 [10/700 $\mu \mathrm{s}$ ])
- between coil and contacts 2500 V
- between adjacent contact sets 1500 V
- between open contacts 1500 V

| Nominal <br> Voltage | Minimum <br> Voltage | Maximum <br> voltage | Release Voltage <br> Minimum | Coil Power <br> mW | Coil Resistance <br> $\Omega+/-10 \%$ | Relay <br> Code |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 5 | 3.75 | 12.10 | 0.50 | 140 | 178 | C-BT53/1 |
| 12 | 9.00 | 28.90 | 1.20 | 140 | 1029 | C-BT53/3 |
| 24 | 18.00 | 48.50 | 2.40 | 200 | 2880 | C-BT53/5 |

2 pole telecom / signal relay, polarised, 2 pole changeover / 2 Form C / DPDT

- Max. Switching power: 60W / 62.5VA
- Max. Switching voltage: 220VDC / 250VAC
- Max. Switching current: 2A
- Bifurcated contacts: Palladium-Ruthenium, gold covered
- Low coil power consumption: 5V and 12 V version: 140 mW 24 V version: 200 mW

Direct replacement for the BT53 / BT53W series, Omron G5A-234P-53, Panasonic DF2 and Fujitsu FBR46 relays

The overall Cephos C-BT53 module dimensions are: $16 \times 10 \mathrm{~mm}$, identical to the original BT53, G5A-234P-53, DF2 and FBR46 footprints. The gold finished module pins enable easy insertion into an existing 12 W dil socket or direct soldering into a printed circuit board.

