

AXICOM

Telecom-, Signal and RF Relays

Reed V23100-V4 Relay

Reed V23100-V4 Relay

1 and 2 pole relays
non-polarized, non-latching

ROHS compliant (Directive 2002/95/EC) as per product date code 0501.

Features

- Direct coil control with TTL-signals possible
- Highly reliable switching
- High switching rates
- Ultrasonic cleanable
- High vibration and shock resistance

Typical applications

- Incircuit tester
- Measuring and control systems
- Telecom equipment
- Alarm and security equipment

Relay Types

DIP version (flat)

- Standard version
- Electrostatic shield between coil and contact
- Protective diode
- Electrostatic shield and protective diode
- Contact arrangement:
1 form a (1 normally open contact) or
1 form c (1 changeover contact)

DIP version (high)

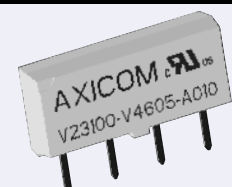
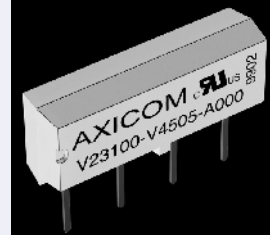
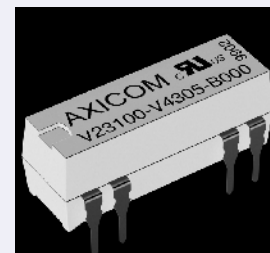
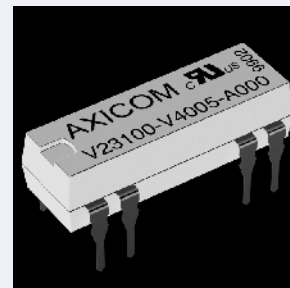
- Standard version
- Electrostatic shield between coil and contact
- Protective diode
- Electrostatic shield and protective diode
- Contact arrangement:
2 form a (2 normally open contacts) or
1 form c (1 changeover contact)

SIL version

- Standard version
- Protective diode
- Contact arrangement:
1 form a (1 normally open contact)

Mini SIL version

- Standard version
- Protective diode
- Standard internal magnetic shield
- Contact arrangement:
1 form a (1 normally open contact)



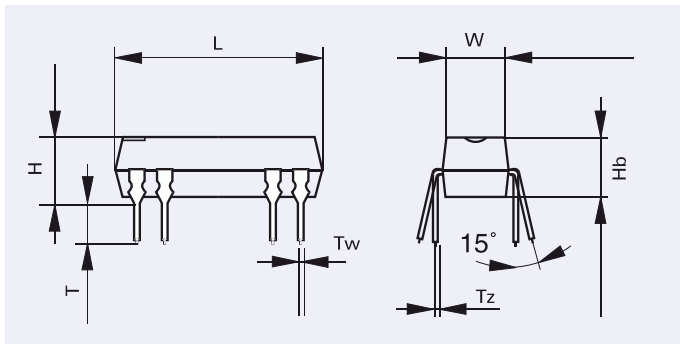
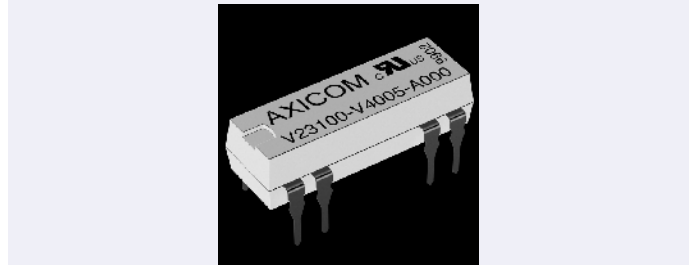
Reed V23100-V4 Relay

Dimensions

Dimensions in mm

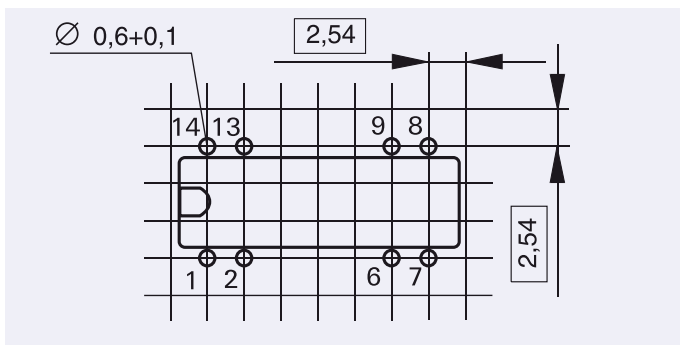
DIP version (flat)

DIP flat version		
	mm	inch
L	19.30 - 0.2	0.760 - 0.008
W	6.40 - 0.2	0.252 - 0.008
H	5.70 - 0.2	0.224 - 0.008
Hb	5.10 - 0.2	0.201 - 0.008
T	3.20 ± 0.1	0.126 ± 0.004
Tw	0.50 ± 0.1	0.020 ± 0.004
Tz	0.25 ± 0.1	0.010 ± 0.004



Mounting hole layout

Top view



Terminal assignment

Top view

1 form a standard

1 form a with diode

1 form a with electrostatic shield and diode

1 form c standard

1 form a with electrostatic shield

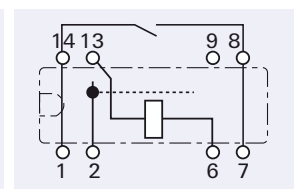
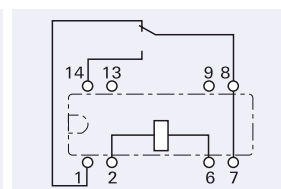
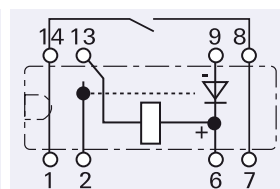
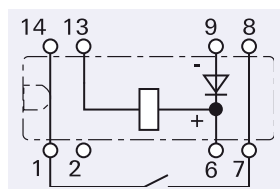
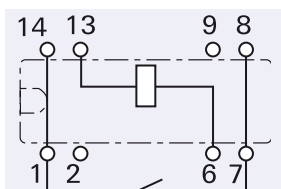
A000

A010

A011

C000

A001



Reed V23100-V4 Relay

Coil Data (values at 23 °C)

Ordering Information

Nominal voltage U_{nom}	Operate/set voltage range		Release/ reset voltage Minimum	Coil power	Coil Resistance	Relay code	Tyco part number
	Minimum voltage U_{min}	Maximum voltage U_{max}					
Vdc	Vdc	Vdc	Vdc	mW	$\Omega / \pm 10\%$		

DIP version flat: 1 form a contact, standard

5	3.5	22	0.75	50	500	V23100-V4005-A000	1393763-1
12	8.4	33	1.80	144	1000	V23100-V4012-A000	1393763-6
15	10.5	44	2.25	112	2000	V23100-V4015-A000	1-1393763-0
24	16.8	44	3.60	288	2000	V23100-V4024-A000	1-1393763-4

DIP version flat: 1 form a contact, with diode

5	3.5	14	0.75	50	500	V23100-V4005-A010	1393763-4
12	8.4	25	1.80	144	1000	V23100-V4012-A010	1393763-8
15	10.5	47	2.25	112	2000	V23100-V4015-A010	1-1393763-2
24	16.8	47	3.60	288	2000	V23100-V4024-A010	1-1393763-6

DIP version flat: 1 form c contact, standard

5	3.5	13 (14.5)*	0.75	125	200	V23100-V4305-C000	2-1393763-0
12	8.4	22 (23.5)*	1.80	288	500	V23100-V4312-C000	2-1393763-8
15	10.5	44 (14.5)*	2.25	112	2000	V23100-V4315-C000	3-1393763-4
24	16.8	44 (49.0)*	3.60	288	2000	V23100-V4324-C000	4-1393763-0

DIP version flat: 1 form a contact, with electrostatic shield

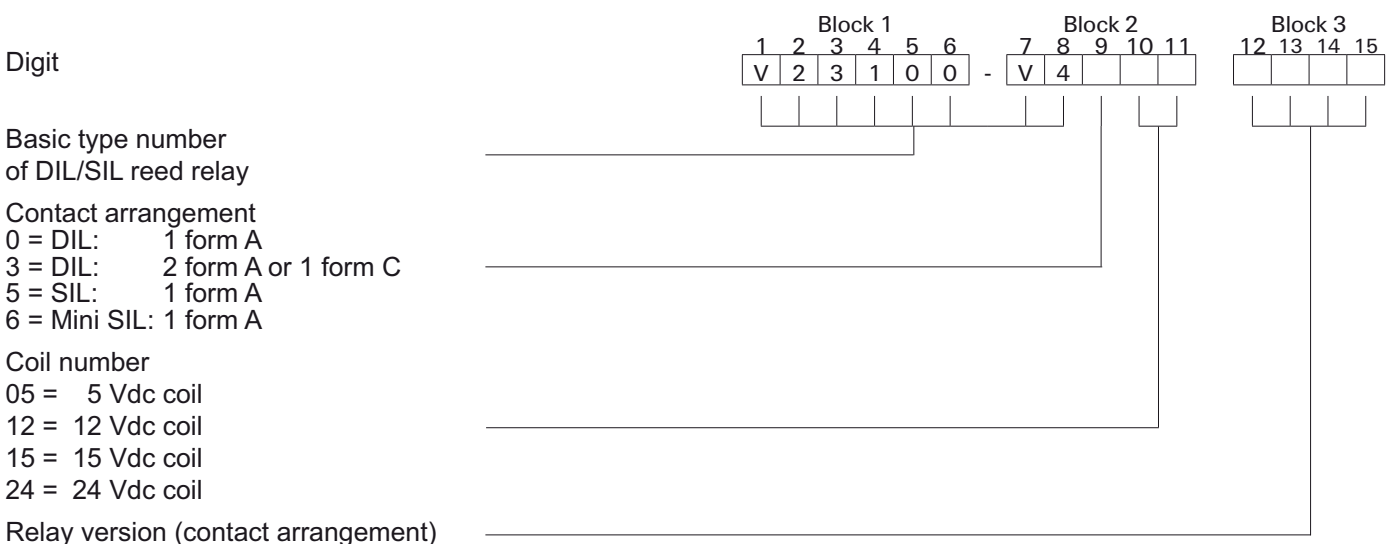
5	3.5	22	0.75	50	500	V23100-V4005-A001	1393763-3
12	8.4	33	1.80	144	1000	V23100-V4012-A001	1393763-7
15	10.5	44	2.25	112	2000	V23100-V4015-A001	1-1393763-1
24	16.8	44	3.60	288	2000	V23100-V4024-A001	1-1393763-5

DIP version flat: 1 form a contact, with electrostatic shield and diode

5	3.5	14	0.75	50	200	V23100-V4005-A011	1393763-3
12	8.4	25	1.80	144	1000	V23100-V4012-A011	1393763-9
15	10.5	47	2.25	112	2000	V23100-V4015-A011	1-1393763-3
24	16.8	47	3.60	288	2000	V23100-V4024-A011	1-1393763-7

* Values in brackets refer to high relay with protective diode

Relay Code



Ordering example: V23100-V4005-A010 DIL reed relay with 1 make, 5 V nominal voltage, with clamping diode (spark suppression)

Reed V23100-V4 Relay

Contact Data

Type of relay	DIP version			SIL version	Mini SIL Version
Type of contact/s	1 form a	2 form a	1 form c	1 form a	1 form a
Contact material	Ruthenium				
Maximum continuous current	1 A		1.2 A	1 A	1 A
Maximum switching current	0.5 A		0.25 A	0.5 A	0.5 A
Maximum switching voltage at nominal voltage: 5 Vdc 12-24 Vdc	200 Vdc / Vac peak 200 Vdc / Vac peak		175 Vdc 175 Vdc peak	200 Vdc / Vac 200 Vdc / Vac	200 Vdc / Vac peak 200 Vdc / Vac peak
Maximum switching capacity					
DC voltage	10 W		3 W	10 W	10 W
AC voltage	10 VA		3 VA	10 VA	10 VA
Initial contact resistance / measuring condition:	<150 mΩ				
Electrical endurance	at 12 V / 10 mA at 24 V / 400 mA		5 x 10 ⁷ 5 x 10 ⁶		

Insulation

Insulation resistance at 500 Vdc	contact coil > 10 ⁹ Ω			
Dielectric test voltage (1 min)				
contact / coil	1500 Vdc	1500 Vdc	1500 Vdc	1500 Vdc
contact / contact	250 Vdc	200 Vdc	250 Vdc	225 Vdc

High Frequency Data

Capacitance	
between coil and contacts	max. 2 pF
between adjacent contact sets	max. 1 pF
between open contacts	max. 1 pF

General Data

Type of relay	DIP version			SIL version	Mini SIL Version
Type of contact/s	1 form a	2 form a	1 form c	1 form a	1 form a
Maximum operate time (including bounce)	0.75 ms		1.1 ms	0.75 ms	0.75 ms
Maximum release time	0.15 ms		1.6 ms	0.15 ms	0.15 ms
Operating temperature range	-40 °C ... +85 °C				
Storage temperature	-40 °C ... +95 °C				
Thermal resistance	Approx. 75 K / W				
Maximum permissible coil temperature	105 °C				
Vibration resistance (function)	30 G 10 to 2000 Hz		30 G 50 to 2000 Hz	30 G 10 to 2000 Hz	30 G 10 to 2000 Hz
Shock resistance, half sinus, 11 ms	150 G		50 G	150 G	50 G
Degree of protection	immersion cleanable, IP 67				
Mounting position	any				
Resistance to soldering heat	265 °C / 10 s				