

Signal Printed Circuit Board Relays
RA / RA4 RELAY

RA: 1 Amp DPDT, RA4: 1 Amp 4PDT
L - RA: 0.795", RA4:1.387"
W - RA:0.394", RA4:0.394"
H - 0.394", RA4:0.394"



CONTACT DATA

Arrangement - 2 form C (DPDT), 4 form C (4PDT)
Material - Gold overlay silver palladium alloy vs. silver palladium alloy
Type - Bifurcated
Resistance (initial) -Maximum 100 m
Rating (resistive) - 24 VDC 1 A or 120 VAC 0.5 A
Life Expectancy - Mechanical:2 x 10⁷ ops. min.
Electrical: 2 x 10⁵ ops. min. (0.5 A 120 VAC)
2 x 10⁵ ops. min. (1 A 24 VAC)

Maximum Carrying Current: 2 A

COIL DATA

Voltage (at 20°C) - 1.5 to 48 VDC
Power (at 20°C) - Operate:Standard: 67 to 90 mW
Single winding latching: 35 to 100 mW
Double winding latching: 75 to 180 mW
Nominal:Standard: 150 to 200 mW
Single winding latching: 75 to 200 mW
Double winding latching: 150 to 200 mW

Operate (at 20°C) - Less than 70% of nominal voltage

GENERAL DATA

Insulation Resistance - 1000M at 500 VDC (expect between P & S coil)
Dielectric Strength - 1000 VAC (between open contacts)
1500 VAC (between all other conductors)
(expect between P & S coil)

Surge Strength - 1500 V between coil and contact, adjacent contacts

Temperature Range - -40°C to +80°C

Time Value - Operate: RA, RA4:6 msec.
Release: RA, RA4:4 msec.;RAL, RA4L:6msec.

Enclosure - PBT nominal voltage

Vibration Resistance -RA:30 G, RA4: 20 G (10 to 55 Hz) Unerror
30 G, RA4:30 G, (10 to 55 Hz) Destruction

Shock Resistance -RA: 50 G, RA4:30 G, (11 ±1 mS) Unerror
100 G, RA4:100 G, (11±1 mS) Destruction

Weight - Approx.RA: 3.7 g;RA4: 6.4 g

Enclosure - PBT

Non-Latching RA () W-K Type

Nominal Voltage	Coil Resistance (±10%)	Must Operate Voltage (VDC at 20 °C)	Must Release Voltage (VDC at 20 °C)	Ordering Code
				Standard
1.5	15	1.0	0.15	RA 1.5W-K
3	60	2.0	0.3	RA 3W-K
4.5	135	3.1	0.45	RA 4.5W-K
5	167	3.4	0.5	RA 5W-K
6	240	4.0	0.6	RA 6W-K
9	540	6.1	0.9	RA 9W-K
12	960	8.1	1.2	RA 12W-K
18	2,160	12.3	1.8	RA 18W-K
24	2,880	16.1	2.4	RA 24W-K
48	11,520	32.2	4.8	RA 48W-K

Single Winding Latching RAL () W-K Type

1.5	30	1.0	-1.0	RAL 1.5W-K
3	120	2.1	-2.1	RAL 3W-K
4.5	270	3.1	-3.1	RAL 4.5W-K
5	335	3.4	-3.4	RAL 5W-K
6	480	4.1	-4.1	RAL 6W-K
9	1,080	6.3	-6.3	RAL 9W-K
12	1,920	8.3	-8.3	RAL 12W-K
18	4,320	12.5	-12.5	RAL 18W-K
24	5,760	16.6	-16.6	RAL 24W-K
48	11,520	21.0	-21.0	RAL 48W-K

Double Winding Latching RAL-D () W-K Type

Nominal Voltage		Coil Resistance (±10%)	Must Operate Voltage (VDC at 20 °C)	Reset Voltage (VDC at 20 °C)	Ordering Code
					Standard
1.5	P/S	15	1.0	1.0	RAL D1.5W-K
3	P/S	60	2.0	2.0	RAL D3W-K
4.5	P/S	135	3.1	3.1	RAL D4.5W-K
5	P/S	167	3.4	3.4	RAL D5W-K
6	P/S	240	4.0	4.0	RAL D6W-K
9	P/S	540	6.1	6.1	RAL D9W-K
12	P/S	960	8.1	8.1	RAL D12W-K
18	P/S	2,160	12.3	12.3	RAL D18W-K
24	P/S	2,880	16.1	16.1	RAL D24W-K
48	P/S	11,520	32.2	32.2	RAL D48W-K

Standard RA4 () W-K Type

1.5	11	1.0	0.15	RA4 1.5W-K
3	45	2.1	0.3	RA4 3W-K
4.5	101	3.1	0.45	RA4 4.5W-K
5	125	3.5	0.5	RA4 5W-K
6	180	4.2	0.6	RA4 6W-K
9	405	6.3	0.9	RA4 9W-K
12	720	8.4	1.2	RA4 12W-K
18	1,620	12.6	1.8	RA4 18W-K
24	2,880	16.8	2.4	RA4 24W-K
48	11,520	33.6	4.8	RA4 48W-K

Single Winding Latching Type RA4L () W-K Type

1.5	25	1.0	-1.0	RA4L 1.5W-K
3	100	2.1	-2.1	RA4L 3W-K
4.5	225	3.1	-3.1	RA4L 4.5W-K
5	278	3.5	-3.5	RA4L 5W-K
6	400	4.2	-4.2	RA4L 6W-K
9	900	6.3	-6.3	RA4L 9W-K
12	1,600	8.4	-8.4	RA4L 12W-K
18	3,600	12.6	-12.6	RA4L 18W-K
24	6,400	16.8	-16.8	RA4L 24W-K
48	25,600	33.6	-33.6	RA4L 48W-K

DoubleWinding Latching Type RA4L-D () W-K Type

1.5	P/S	12.5	1.0	1.0	RA4L D1.5W-K
3	P/S	50	2.1	2.1	RA4L D3W-K
4.5	P/S	113	3.1	3.1	RA4L D4.5W-K
5	P/S	139	3.5	3.5	RA4L D5W-K
6	P/S	200	4.2	4.2	RA4L D6W-K
9	P/S	450	6.3	6.3	RA4L D9W-K
12	P/S	800	8.4	8.4	RA4L D12W-K
18	P/S	1,800	12.6	12.6	RA4L D18W-K
24	P/S	3,200	16.8	16.8	RA4L D24W-K
48	P/S	12,800	33.6	33.6	RA4L D48W-K