



V23105 series

High Sensitivity, DIP PC Board Relay

File E48393

File LR45064-27

Features

- Standard DIP configuration mates with 16-pin socket.
- Meets FCC Part 68 (10/160μs).
- For applications in telecommunications, office automation, security devices, measurement and control equipment.
- Immersion cleanable, plastic sealed case.
- 150mW, 200mW, 400mW or 500mW coil.
- Ultrasonic cleaning not recommended.

Contact Data @ 20°C

Arrangement: 2 Form C (DPDT) single contacts.

Material: Stationary: Silver-nickel, gold overlaid.

Ratings: Max. Switched Current: 3A.

Max. Carry Current: 3A.

Max. Switched Voltage (at nom. voltage): 250VDC, 230VAC.

Max. Switched Power: 60W DC or 120VA AC, resistive load.

Min. Switching Load: 10mVDC.

Initial Contact Resistance: 100 milliohms @ 10mA / 20mV.

Expected Mechanical Life: 15,000,000 ops.

Expected Electrical Life: 2 million operations @ 100mA / 6VDC.

500,000 operations @ 1.0A / 30VDC.

100,000 operations @ 2.0A / 30VDC for

400mW and 500mW versions only.

300,000 operations @ 500mA / 230VAC.

Thermoelectric potential: <15μV.

Initial Dielectric Strength

Between Open Contacts: 750VAC rms; 1,000VDC for 1 minute.

Between Coil and Contacts: 1,000VAC rms; 1,500VDC for 1 minute.

Between Poles: 750VAC rms; 1,000VDC for 1 minute.

Surge Voltage: 1,500V surge per FCC Part 68.

Initial Insulation Resistance

Between Contact and Coil: 10⁹ ohms or more @ 500VDC.

Coil Data @ 20°C

Voltage: 5 to 48VDC.

Nominal Power: See Coil Data table.

Duty Cycle: Continuous.

Coil Data @ 20°C

Nominal Voltage (VDC)	Minimum Voltage (VDC)	Maximum Voltage (VDC)	Resistance ±10% (Ohms)	Coil Version Voltage Code
150mW versions				
3	2.4	10.2	60	008
5	4.0	13.0	167	001
6	4.8	15.6	240	002
9	7.2	23.4	540	006
12	9.6	31.2	960	003
24	19.2	59.5	3,480	005
200mW versions				
3	2.1	6.7	45	308
5	3.5	11.2	125	301
6	4.2	13.5	180	302
9	6.3	20.3	405	306
12	8.4	27.0	720	303
24	16.8	54.1	2,880	305
48	33.6	108.3	11,520	307
400mW versions				
5	3.5	7.9	62	401
6	4.2	9.5	90	402
9	6.3	14.3	203	406
12	8.4	19.1	360	403
24	16.8	37.9	1,440	405
48	33.6	75.8	5,760	407
500mW versions				
5	3.5	6.3	36	501
6	4.2	8.9	70	502
9	6.3	12.5	140	506
10	7.0	15.0	200	504
12	8.4	18.0	280	503
24	16.8	36.0	1,050	505
48	33.6	72.0	4,000	507

Operate Data @ 20°C

Operate Voltage: 70% of nominal voltage (80% for 150mW coil).

Release Voltage: 5% of nominal voltage.

Operate Time (Including Bounce): <10 ms.

Release Time (Including Bounce): <10 ms.

Environmental Data

Temperature Range: 150/200mW coil: -25°C to +85°C.

400mW coil: -25°C to +70°C.

500mW coil: -25°C to +60°C.

Maximum Allowable Coil Temperature: 105°C.

Thermal Resistance: approx. 100K/W.

Shock: Functional: 10g.

Destructive: 40g.

Vibration, 10-55 / 55-500 Hz.: Functional: 10g.

Destructive: 20g.

Mechanical Data

Termination: DIP compatible, printed circuit terminals.

Enclosure Type: Immersion cleanable (IP67) plastic case.

Weight: 0.21 oz. (6g) approximately.

Ordering Information

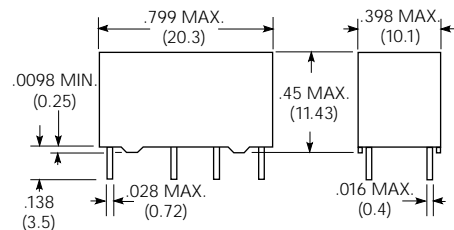
Typical Part Number ►		V23105-A5	4	01	A201
1. Basic Series: V23105-A5 = Miniature PC board relay.					
2. Version: 0 = 150mW coil. 3 = 200mW coil. 4 = 400mW coil. 5 = 500mW coil.					
3. Coil Voltage: 08 = 3VDC (150mW and 200mW coils only) 02 = 6VDC 04 = 10VDC (500mW coil only) 05 = 24VDC 01 = 5VDC 06 = 9VDC 03 = 12VDC 07 = 48VDC*					
4. Contact Type and Material: A201 = DPDT, silver-nickel, gold overlaid.					

* Not available with 150mW coil.

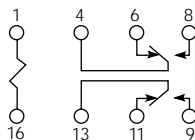
Stock Items – The following items are normally maintained in stock for immediate delivery.

V23105A5001A201 V23105A5401A201
V23105A5003A201 V23105A5403A201
V23105A5005A201 V23105A5405A201
V23105A5407A201

Outline Dimensions



Wiring Diagram (Bottom View)



PC Board Layout (Bottom View)

