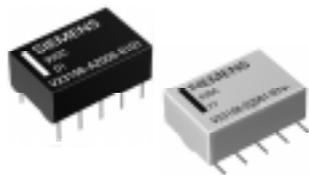


Through Hole or Surface Mount



V23106 series

Miniature, Sealed
PC Board Relays

File E85596

File LR65354

Features

- Surface and through-hole mounting types.
- Ultra low profile: 5mm height.
- DPDT contact arrangement.
- Latching or nonlatching versions available.
- Hermetically sealed DIL plastic case.
- High sensitivity: 140mW nominal power.
- Typical applications are: telecommunications equipment, computer peripherals, office automation, measurement and control systems, and sensor control.
- Surge voltage withstand: 1,500V FCC Part 68.
- Ultrasonic cleaning should be avoided.

Contact Data @ 20°C

Arrangements: DPDT (2 Form C), bifurcated contacts.**Material:** Movable Contact: Silver-palladium alloy.**Stationary Contact:** Gold clad silver-palladium alloy.**Contact Ratings:** 1A @ 30VDC.

0.5A @ 125VAC.

Maximum Switched Voltage: 220VDC or 250VAC.**Maximum Switched Current:** 1A AC/DC.**Maximum Carry Current:** 1A.**Maximum Switched Power:** 30W or 62.5VA.**Minimum Switched Load:** 0.01mA @ 10mVDC.**Expected Mechanical Life:** 100 million operations.**Expected Electrical Life:** 200,000 operations (1A @ 30VDC).

100,000 operations (0.5A @ 125VAC).

Initial Contact Resistance: 50 milliohms maximum @ 1.5mA, 200µV.

Initial Dielectric Strength

Between Open Contacts: 1,000VAC for 1 minute.

1,500VAC FCC Part 68 Surge Test.

Between Coil and Contacts: 1,000VAC for 1 minute.

1,500VAC FCC Part 68 Surge Test.

Between Contact Poles: 1,000VAC for 1 minute.

2,500VAC FCC Part 68 Surge Test.

Initial Insulation Resistance

Between Mutually Insulated Conductors: 10⁹ ohms minimum @ 500VDC.

Coil Data @ 20°C

Voltage: 3 - 24VDC.**Duty Cycle:** Continuous.

Nominal Voltage (VDC)	Resistance ± 10% (Ohms)	Pull-In Voltage (VDC)	Max. Voltage (VDC)	Drop-Out Voltage (VDC)	Power Consumption (mW)	Coil Code Number
Non-Latching, One Coil						PIN -J20 SMD -M20
3	64	2.25	7.5	0.3	140	008
5	178	3.75	12.5	0.5	140	001
6	257	4.5	15.0	0.6	140	002
9	579	6.75	22.5	0.9	140	006
12	1028	9.0	30.0	1.2	140	003
24	2880	18.0	48.0	2.4	200	005
Latching, One Coil						PIN -L21 SMD -P21
3	90	2.25	8.7	0.3	100	108
5	250	3.75	14.5	0.5	100	101
6	360	4.5	17.4	0.6	100	102
9	810	6.75	26.1	0.9	100	106
12	1440	9.0	34.8	1.2	100	103
24	3840	18.0	57.6	2.4	150	105
Latching, Two Coils						PIN -K22 SMD -N22
3	45	2.25	6.0	0.3	200	208
5	125	3.75	10.0	0.5	200	201
6	180	4.5	12.0	0.6	200	202
9	405	6.75	18.0	0.9	200	206
12	720	9.0	24.0	1.2	200	203
24	1920	18.0	40.8	2.4	200	205

Operate Data @ 20°C

Operate Voltage: 75% of nominal voltage.**Release Voltage:** 10% of nominal voltage.**Operate Time:** 2ms, typical.**Release Time:** 1ms, typical.**Set Time (Latching):** 2ms, typical.**Reset Time (Latching):** 2ms, typical.

Environmental Data

Storage Temperature Range: -40°C to +85°C.**Operating Temperature Range:** -40°C to +85°C for SMD.
-40°C to +70°C for PIN.**Shock: Mechanical:** 100g (6ms).**Electrical:** 50g (11ms).**Vibration: Mechanical:** 10-55 Hz. double amplitude 5mm.**Electrical:** 10-55 Hz. double amplitude 3mm.

Mechanical Data

Termination: Through hole or surface mount printed circuit terminals.**Enclosure Type:** Immersion cleanable, hermetically sealed DIL plastic case.**Weight:** .053 oz (1.5g) approximately.

Ordering Information

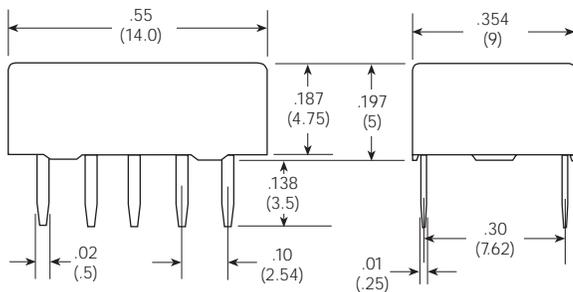
Typical Part Number ▶		V23106	J20	01	B201
1. Basic Series: V23106 = Miniature PCB relay, pin or surface mount.					
2. Relay Type: J20 = pin version, monostable, 1 coil. M20 = smd version, monostable, 1 coil		L21 = pin version, latching, 1 coil. P21 = smd version, latching, 1 coil.	K22 = pin version, latching, 2 coil. N22 = smd version, latching, 2 coil.		
3. Coil Number: 08 = 3VDC 02 = 6VDC 03 = 12VDC 01 = 5VDC 06 = 9VDC 05 = 24VDC					
4. Contact Arrangement/Material: B201 = DPDT, silver gold-plated contacts.					

Stock Items

V23106J2001B201 V23106J2003B201 V23106J2005B201

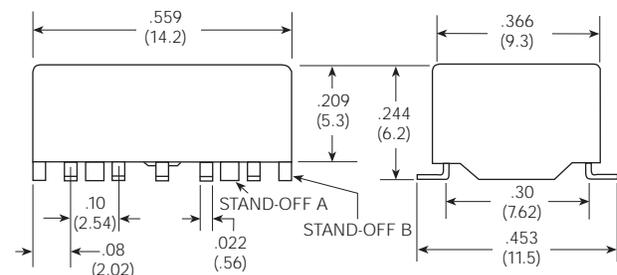
Outline Dimensions

Through-Hole



Tolerance: $\pm 0.3 / \pm .012$

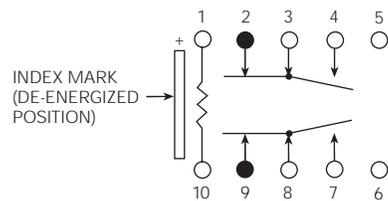
Surface Mount



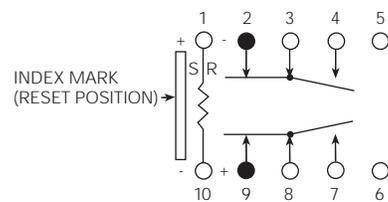
Tolerance: $\pm 0.3 / \pm .012$

Wiring Diagrams (Bottom Views)

Single Side Stable

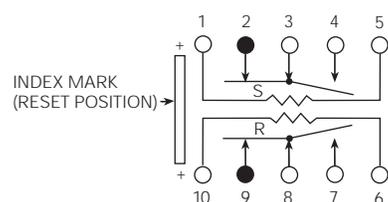


1 Coil Latching

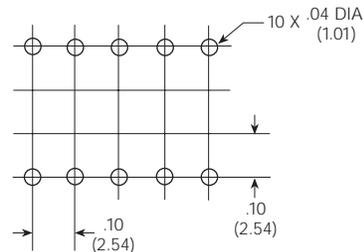


S = Set
R = Reset

2 Coil Latching

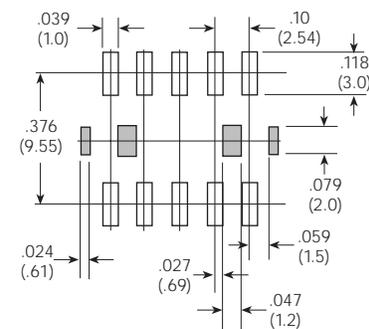


Through-Hole Layout



Tolerance: $\pm 0.1 / \pm .004$

Surface Mount Layout



Tolerance: $\pm 0.1 / \pm .004$

- Soldering pad for terminal.
- Temporary glue pad for stand-off A or B.