

**RoHS Compliant** 



A10

12.0 (23.8) x 12.9 x 9.9 mm

#### **Features**

Switching capacity up to 30A

Dual relay available

• Withstands high temperature : 105°C operating temperature

PC pin mounting availableUltra light weight : 4g

### Contact Data\*

| Contact Arrangement | 1A = SPST N.O.             |  |
|---------------------|----------------------------|--|
|                     | 1C = SPDT                  |  |
|                     | 2A = (2) SPST N.O.         |  |
|                     | 2C = (2) SPDT              |  |
| Contact Rating      | 1A: 25A, 30A @ 14VDC       |  |
|                     | 1C : 25A, 30A @ 14VDC N.O. |  |
|                     | : 20A, 25A @ 14VDC N.C.    |  |
|                     | 2A: 25A, 30A @ 14VDC       |  |
|                     | 2C : 25A, 30A @ 14VDC N.O. |  |
|                     | : 20A, 25A @ 14VDC N.C.    |  |

| Contact Resistance          | < 30 milliohms initial  |
|-----------------------------|---|
| Contact Material            | AgSnO <sub>2</sub>  |
| Max Switching Power         | 420W  |
| Max Switching Voltage       | 28VDC   |
| Max Switching Current       | 40A On, 30A Off<br>(current flow 3 sec max with make/<br>break ratio of 1:10) |
| Limiting Continuous Current | NO/NC : 30A/25A @ 23°C<br>NO/NC : 25A/20A @ 85°C                              |

### Coil Data\*

| Coil Vo | •     | Coil Resistance<br>Ω +/- 10% | Pick Up Voltage<br>VDC (max) | Release Voltage<br>VDC (min) | Coil Power<br>W | Operate Time<br>ms | Release Time<br>ms |
|---------|-------|------------------------------|------------------------------|------------------------------|-----------------|--------------------|--------------------|
| Rated   | Max   |                              | 70% of rated volt-<br>age    | 10% of rated volt-<br>age    |                 |                    |                    |
| rtated  | IVIGA |                              | age                          | age                          |                 |                    |                    |
| 5       | 6.0   | 45                           | 3.50                         | 0.5                          | .55             | ≤3                 | ≤ 1.5              |
| 9       | 10.8  | 147                          | 6.30                         | 0.9                          | .55             |                    |                    |
| 10      | 12.0  | 181                          | 7.00                         | 1.0                          | .57             |                    |                    |
| 12      | 14.4  | 254                          | 8.40                         | 1.2                          | 55              | ≤ 4                |                    |
| 24      | 28.8  | 1152                         | 16.80                        | 2.4                          | .55             | ≥ 4                |                    |

# General Data\*

| Electrical Life @ rated load         | 100K cycles, average              |
|--------------------------------------|-----------------------------------|
| Mechanical Life                      | 10M cycles, average               |
| Insulation Resistance                | 100M Ω min. @ 500VDC initial      |
| Dielectric Strength, Coil to Contact | 500V rms min. @ sea level initial |
| Contact to Contact                   | 500V rms min. @ sea level initial |
| Shock Resistance                     | 300m/s <sup>2</sup> for 6 ms      |
| Vibration Resistance                 | 1.27mm double amplitude 10~40Hz   |
| Terminal (Copper Alloy) Strength     | 10N                               |
| Operating Temperature                | -40°C to +105°C                   |
| Storage Temperature                  | -40°C to +155°C                   |
| Solderability                        | 260°C for 5 s                     |
| Weight                               | 4g, 8g                            |

Values can change due to the switching frequency, desired reliability levels, environmental conditions and in-rush load levels. It is recommended to test actual load conditions for the application. It is the user's responsibility to determine the performance suitability for their specific application. The use of any coil voltage less than the rated coil voltage may compromise the operation of the relav.

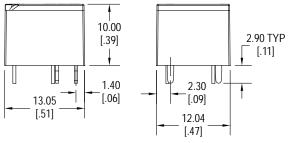


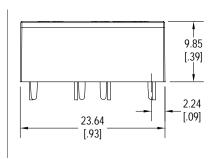
# **Ordering Information**

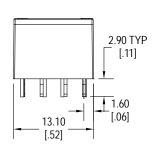
| 1. Series  | A10 | 1C | S | 12VDC |
|--|-----|----|---|-------|
| A10  |     |    |   |       |
| 2. Contact Arrangement<br>1A = SPST N.O.<br>1C = SPDT<br>2A = (2) SPST N.O.<br>2C = (2) SPDT |     |    |   |       |
| 3. Sealing Option<br>S = Sealed  |     |    |   |       |
| 4. Coil Voltage 5VDC 9VDC 10VDC 12VDC 24VDC  |     |    |   |       |

# **Dimensions**

### Units = mm







# Schematics & PC Layouts

