



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 available
- Ultra light weight : 4g

## Contact Data\*

|                     |                                                                                                                                                                  |
|---------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Contact Arrangement | 1A = SPST N.O.<br>1C = SPDT<br>2A = (2) SPST N.O.<br>2C = (2) SPDT                                                                                               |
| Contact Rating      | 1A : 25A, 30A @ 14VDC<br>1C : 25A, 30A @ 14VDC N.O.<br>: 20A, 25A @ 14VDC N.C.<br>2A : 25A, 30A @ 14VDC<br>2C : 25A, 30A @ 14VDC N.O.<br>: 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 Voltage<br>VDC |      | 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    |                 |                    |                    |
| 5                   | 6.0  | 45                           | 3.50                         | 0.5                          | .55             | ≤ 3                | ≤ 1.5              |
| 9                   | 10.8 | 147                          | 6.30                         | 0.9                          |                 |                    |                    |
| 10                  | 12.0 | 181                          | 7.00                         | 1.0                          |                 |                    |                    |
| 12                  | 14.4 | 254                          | 8.40                         | 1.2                          | .55             | ≤ 4                |                    |
| 24                  | 28.8 | 1152                         | 16.80                        | 2.4                          |                 |                    |                    |

## 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<br>Contact to Contact | 500V rms min. @ sea level initial<br>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 relay.

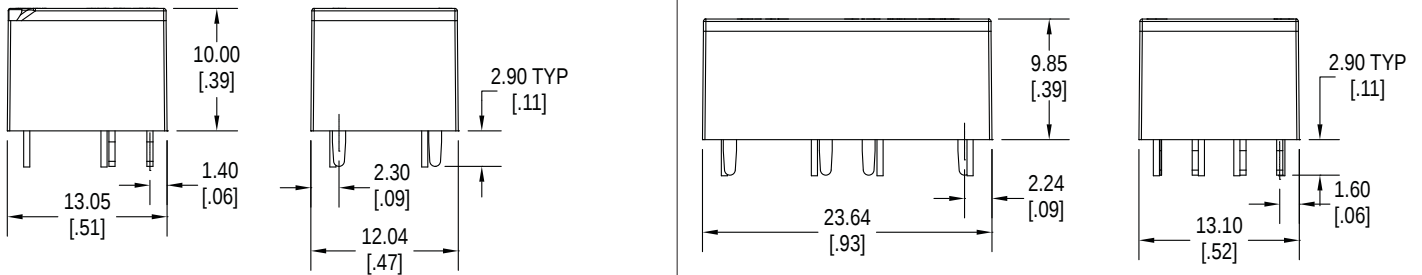
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## Ordering Information

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

## Dimensions

Units = mm



## Schematics & PC Layouts

Bottom Views

1A

1C

2A

2C

