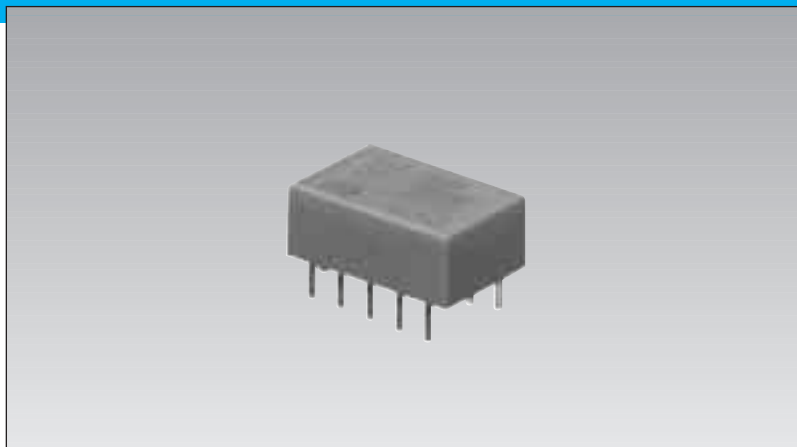


- Compact and Light Weight
- 2 Form C Contact Arrangement
- Low Power Consumption
- Reduced Mounting Space: 15mm x 9.5mm
- High-breakdown Voltage of Coil to Contacts: 1500 VAC, 2500 V (2 x 10  $\mu$ s\*)
- Capable of High-power Switching: 700 VAC, 4.2 A, 4 times in case of accident
- UL Recognised (E73266), CSA Certified (LR46266)
- EN60950 version available on request
- Tube or Taped Packaging

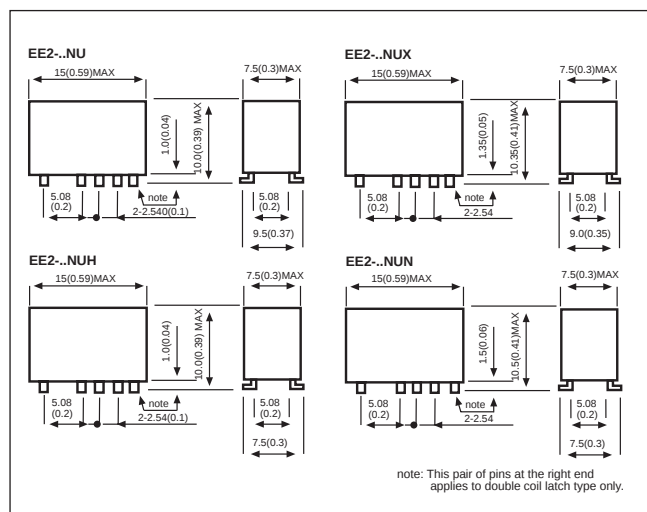


## Specifications

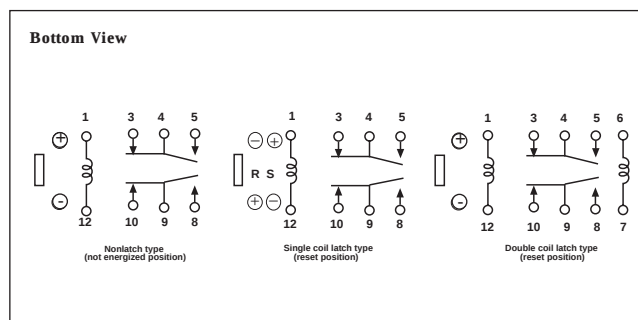
|                                 |                           |                                                                                                                                     |
|---------------------------------|---------------------------|-------------------------------------------------------------------------------------------------------------------------------------|
| Contact form                    |                           | 2 Form C                                                                                                                            |
| Contact material                |                           | Silver alloy with gold alloy overlay                                                                                                |
| Contact rating                  | Maximum switching power   | 30W 125 VA (resistive)                                                                                                              |
|                                 | Maximum switching voltage | 220Vdc 250 Vac                                                                                                                      |
|                                 | Maximum switching current | 2A                                                                                                                                  |
|                                 | Maximum carrying current  | 2A                                                                                                                                  |
| Minimum contact ratings         |                           | 10 mVDC, 100 μA                                                                                                                     |
| Initial contact resistance      |                           | 50 mΩ typ.                                                                                                                          |
| Nominal operating power         | Nonlatch type             | 140 mW (3 to 12 V), 200 mW (24 V)                                                                                                   |
|                                 | Single coil latch type    | 100 mW                                                                                                                              |
|                                 | Double coil latch type    | 140 mW                                                                                                                              |
| Operate time (excluding bounce) |                           | Approximately 2 ms without diode                                                                                                    |
| Release time (excluding bounce) |                           | Approximately 1 ms without diode                                                                                                    |
| Insulation resistance           |                           | 1000 MΩ at 500 VDC                                                                                                                  |
| Breakdown voltage               | Between open contacts     | 1000 VAC (for one minute)                                                                                                           |
|                                 | Between adjacent contacts | 1500 V surge (10 x 160 μs*)                                                                                                         |
|                                 | Between coil to contacts  | 1500 VAC (for one minute)<br>2500V surge (2 x 10 μs*)                                                                               |
| Shock resistance                |                           | 735 m/s <sup>2</sup> (75G) (misoperating)<br>980 m/s <sup>2</sup> (100G) (destructive failure)                                      |
| Vibration resistance            |                           | 10-55Hz, double amplitude 3 mm (20G) (misoperating)<br>10-55Hz, double amplitude 5 mm (30G) (destructive failure)                   |
| Ambient temperature             |                           | -40°C to+ 85°C                                                                                                                      |
| Coil temperature rise           |                           | 18 degrees at nominal coil voltage (140 mW)                                                                                         |
| Running specifications          | Nonload                   | 1 x 10 <sup>7</sup> operations                                                                                                      |
|                                 | Load                      | 50 VDC, 0.1A (resistive) 1 x 10 <sup>6</sup> operations at 85°C<br>10 VDC, 10 mA (resistive) 1 x 10 <sup>6</sup> operations at 85°C |
| Weight                          |                           | Approximately 1.9 g                                                                                                                 |

\*<sup>1</sup> rise time: 10  $\mu$ s, fall time: 160  $\mu$ s \*<sup>2</sup> rise time: 2  $\mu$ s, fall time: 10  $\mu$ s

## Dimensions mm(inch)



## Schematics

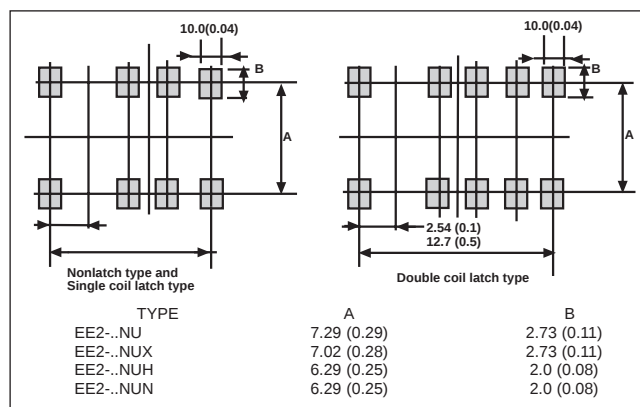


## Part Number System

EE2-3SNU-L

|                                                                                                   |                                                                                         |
|---------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| Packaging code                                                                                    | Nil: Tube<br>L: Embossed carrying tape (L type)<br>R: Embossed carrying tape (R type)   |
| Nil: Standard type                                                                                |                                                                                         |
| NU: UL recognised CSA certified type                                                              |                                                                                         |
| NUH: Minimum footprint type (UL recognised CSA certified type)                                    |                                                                                         |
| NUX: High solder joint reliability type (UL recognised CSA certified type)                        |                                                                                         |
| NUN: High solder joint reliability with Minimum footprint type (UL recognised CSA certified type) |                                                                                         |
| Latch type                                                                                        | Nil: Nonlatch type (standard)<br>S: Single coil latch type<br>T: Double coil latch type |
| Nominal coil voltage (see part numbers)                                                           |                                                                                         |

## Pad layout (bottom view) mm(inch)



## Part Number

### Nonlatch type

at 25°C

| Part Number (Standard) | Nominal Coil Voltage VDC | Coil Resistance $\Omega \pm 10\%$ | Must Operate Voltage VDC | Must Release Voltage VDC |
|------------------------|--------------------------|-----------------------------------|--------------------------|--------------------------|
| EE2-3                  | 3                        | 64.3                              | 2.25                     | 0.3                      |
| EE2-4.5                | 4.5                      | 145                               | 3.38                     | 0.45                     |
| EE2-5                  | 5                        | 178                               | 3.75                     | 0.5                      |
| EE2-6                  | 6                        | 257                               | 4.5                      | 0.6                      |
| EE2-9                  | 9                        | 579                               | 6.75                     | 0.9                      |
| EE2-12                 | 12                       | 1028                              | 9.0                      | 1.2                      |
| EE2-24                 | 24                       | 2880                              | 18.0                     | 2.4                      |

### Single Coil Latch type

at 25°C

| Part Number (Standard) | Nominal Coil Voltage VDC | Coil Resistance $\Omega \pm 10\%$ | Must Operate Voltage VDC | Must Release Voltage VDC |
|------------------------|--------------------------|-----------------------------------|--------------------------|--------------------------|
| EE2-3S                 | 3                        | 90                                | 2.25                     | 2.25                     |
| EE2-4.5S               | 4.5                      | 202.5                             | 3.38                     | 3.38                     |
| EE2-5S                 | 5                        | 250                               | 3.75                     | 3.75                     |
| EE2-6S                 | 6                        | 360                               | 4.5                      | 4.5                      |
| EE2-9S                 | 9                        | 810                               | 6.75                     | 6.75                     |
| EE2-12S                | 12                       | 1440                              | 9.0                      | 9                        |
| EE2-24S                | 24                       | 5760                              | 18.0                     | 18                       |

### Double Coil Latch type

at 25°C

| Part Number (Standard) | Nominal Coil Voltage VDC | Coil Resistance $\Omega \pm 10\%$ | Must Operate Voltage VDC | Must Release Voltage VDC |
|------------------------|--------------------------|-----------------------------------|--------------------------|--------------------------|
| EE2-3T                 | 3                        | S 64.3                            | 2.25                     | -                        |
|                        |                          | R 64.3                            | -                        | 2.25                     |
| EE2-4.5T               | 4.5                      | S 145                             | 3.38                     | -                        |
|                        |                          | R 145                             | -                        | 3.38                     |
| EE2-5T                 | 5                        | S 178                             | 3.75                     | -                        |
|                        |                          | R 178                             | -                        | 3.75                     |
| EE2-6T                 | 6                        | S 257                             | 4.5                      | -                        |
|                        |                          | R 257                             | -                        | 4.5                      |
| EE2-9T                 | 9                        | S 579                             | 6.75                     | -                        |
|                        |                          | R 579                             | -                        | 6.75                     |
| EE2-12T                | 12                       | S 1028                            | 9.0                      | -                        |
|                        |                          | R 1028                            | -                        | 9.0                      |
| EE2-24T                | 24                       | S 4114                            | 18.0                     | -                        |
|                        |                          | R 4114                            | -                        | 18.0                     |

Note S: Set Coil (pin No. 1 and 12) R: Reset Coil (pin No. 6 and 7)