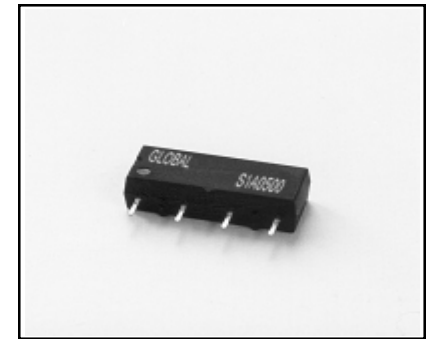


### ■ Features

- Molded epoxy body
- High isolation coil/contact
- Can make high voltage contact
- Sealed construction permits automatic flow soldering and cleaning



UL E155513  
C-UL E155513

### ■ Coil Rating (20°C)

| Contact Form | Part Number | Nominal Voltage (VDC) | Coil Resistance (Ω) ± 10% | Must Operate (VDC) | Must Release (VDC) | Rated Current (mA) | Continuous Voltage (Max) | Special Features        |
|--------------|-------------|-----------------------|---------------------------|--------------------|--------------------|--------------------|--------------------------|-------------------------|
| 1A           | S1A05000    | 5                     | 500                       | 3.75               | 1.0                | 10                 | 10                       | standard                |
|              | S1A12000    | 12                    | 1000                      | 9.0                | 1.2                | 12                 | 20                       | standard                |
|              | S1A24000    | 24                    | 2000                      | 18.00              | 2.4                | 12                 | 28                       | standard                |
| SPST-NO      | S1A050D0    | 5                     | 500                       | 3.75               | 1.0                | 10                 | 10                       | with diode              |
|              | S1A120D0    | 12                    | 1000                      | 9.0                | 1.2                | 12                 | 20                       | with diode              |
|              | S1A240D0    | 24                    | 2000                      | 18.00              | 2.4                | 12                 | 28                       | with diode              |
| 1A           | S1C05M00    | 5                     | 500                       | 3.75               | 1.0                | 25                 | 10                       | magnetic shield         |
|              | S1C12M00    | 12                    | 1000                      | 9.00               | 1.2                | 24                 | 20                       | shield                  |
|              | S1C24M00    | 24                    | 2000                      | 18.00              | 2.4                | 12                 | 28                       |                         |
| SPST-NO      | S1A050X00   | 5                     | 500                       | 3.75               | 1.0                | 25                 | 10                       | diode + magnetic shield |
|              | S1A120X00   | 12                    | 1000                      | 9.00               | 1.2                | 24                 | 20                       |                         |
|              | S1A240X00   | 24                    | 2000                      | 18.00              | 2.4                | 12                 | 28                       | shield                  |

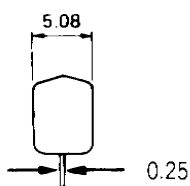
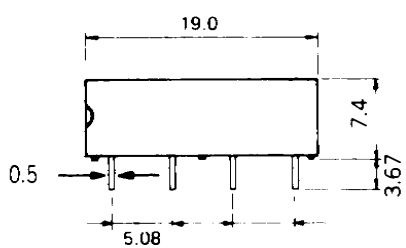
### High Resistance Coil for Low Power Consumption • High Efficiency

|               |            |    |      |       |     |   |    |          |
|---------------|------------|----|------|-------|-----|---|----|----------|
| 1A<br>SPST-NO | SS1A050099 | 5  | 1000 | 3.75  | 1.0 | 5 | 10 | standard |
|               | SS1A120098 | 12 | 2000 | 9.00  | 1.2 | 6 | 20 | standard |
|               | SS1A120099 | 12 | 3000 | 18.00 | 2.4 | 4 | 28 | standard |

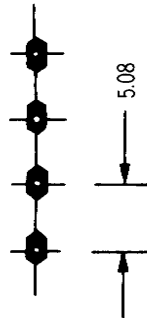
## ■ Specifications

| Item                      | Contact Form | 1A                               |
|---------------------------|--------------|----------------------------------|
| Contact Resistance        |              | 100m $\Omega$ max. initial       |
| Operate Time              |              | 0.5msec max.                     |
| Bounce Time               |              | 0.5msec max.                     |
| Release Time              |              | 0.2msec max.                     |
| Insulation Resistance     |              | 10 <sup>10</sup> $\Omega$ min.   |
| Power                     |              | 10VA max.                        |
| Switching Voltage         |              | 200VDC max.                      |
| Switching Current         |              | 0.5Amps max.                     |
| Carry Current             |              | 1.0Amps max.                     |
| Life Expectancy           |              | 10 <sup>8</sup> (signal level)   |
| Minimum Breakdown Voltage |              | 250VDC across open contact       |
|                           |              | 1000VDC between coil and contact |
| Operating Temperature     |              | -40°C ~ +85°C                    |
| Storage Temperature       |              | -50°C ~ +125°C                   |
| Minimum Permissible Load  |              | 100mVDC 10 $\mu$ A               |
| Vibration                 |              | 20g (10 ~ 2000Hz)                |
| Shock                     |              | 30g (11ms. 1/2 sine wave)        |
| Resonant Frequency        |              | 3.5KHz                           |

## ■ Dimensions

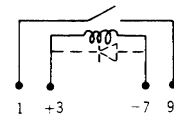


### PCB Layout

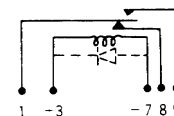


### Circuit Schematic Top View

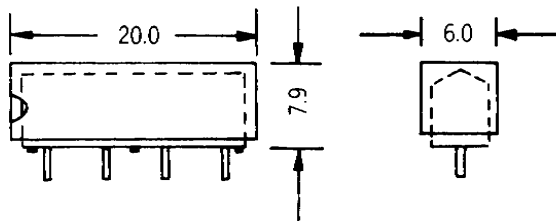
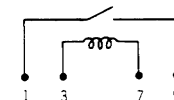
1A  
SPST-NO



1C  
SPDT-CO



1A\*  
SPST-NO



(With Magnetic Shield)

\*High Resistance Coil Type