

| S3 SERIES

S SIZE FORM C (CHANGEOVER) REED RELAY



The S3 series is a compact reed relay with changeover contacts which are often used for safety critical applications.

Low contact resistance, through the use of rhodium contact reed switches, makes the S series suitable for many high voltage applications at DC and low frequency, where performance and reliability are paramount.

These are PCB mount relays, though custom options may be available on request.

Features

- Compact footprint
- Changeover contacts
- PCB Mount
- Available with or without magnetic screen

SPECIFICATIONS

| Contact | Unit | Condition | | | |
|------------------------------------|------------------|-------------------------|--------------------|------------|------------|
| Switch Action | | | SPCO | | |
| Contact Material | | | Rhodium | | |
| Isolation Across Contacts | kV | DC or AC peak | 0.20 | | |
| Isolation Contact to Coil | kV | DC or AC peak | 2 | | |
| Switching Power Max. | VA | resistive | 3 | | |
| Switching Voltage Max. | V | DC | 120 | | |
| Switching Current Max. | A | DC | 0.25 | | |
| Carry Current Max | A | DC | 1.2 | | |
| Capacitance Across Contacts | pF | coil to screen grounded | 1.4 | | |
| Contact Resistance | mΩ max (typical) | | 150 | | |
| Insulation Resistance | Ω min (typical) | | (10 ⁹) | | |
| Coil | | | 5V | 12V | 24V |
| Must Operate Voltage | V | DC | 3.75 | 9 | 18 |
| Must Release Voltage | V | DC | 0.5 | 1.2 | 2.4 |
| Resistance | Ω (± 10%) | | 30 | 180 | 1000 |

Note. The operate / release voltage and coil resistance will change at a rate of 0.4% per degree C. Values are stated at room temperature (20 degrees C)

| Environmental Conditions | Unit | Condition | |
|---|------|-----------|-------------|
| Operating Temperature Range | °C | | -40 to +85 |
| Storage Temperature Range | °C | | -40 to +100 |
| Shock - EN60068-2-27 11ms Half sine 50g. MIL-STD-202G Method 213B, Test condition A. | | | |
| Vibration - EN60068-2-6 Sine vibration 20g peak 10Hz to 2000Hz. MIL-STD-202G Method 204D, Test condition D. | | | |



STANDARD PARTS

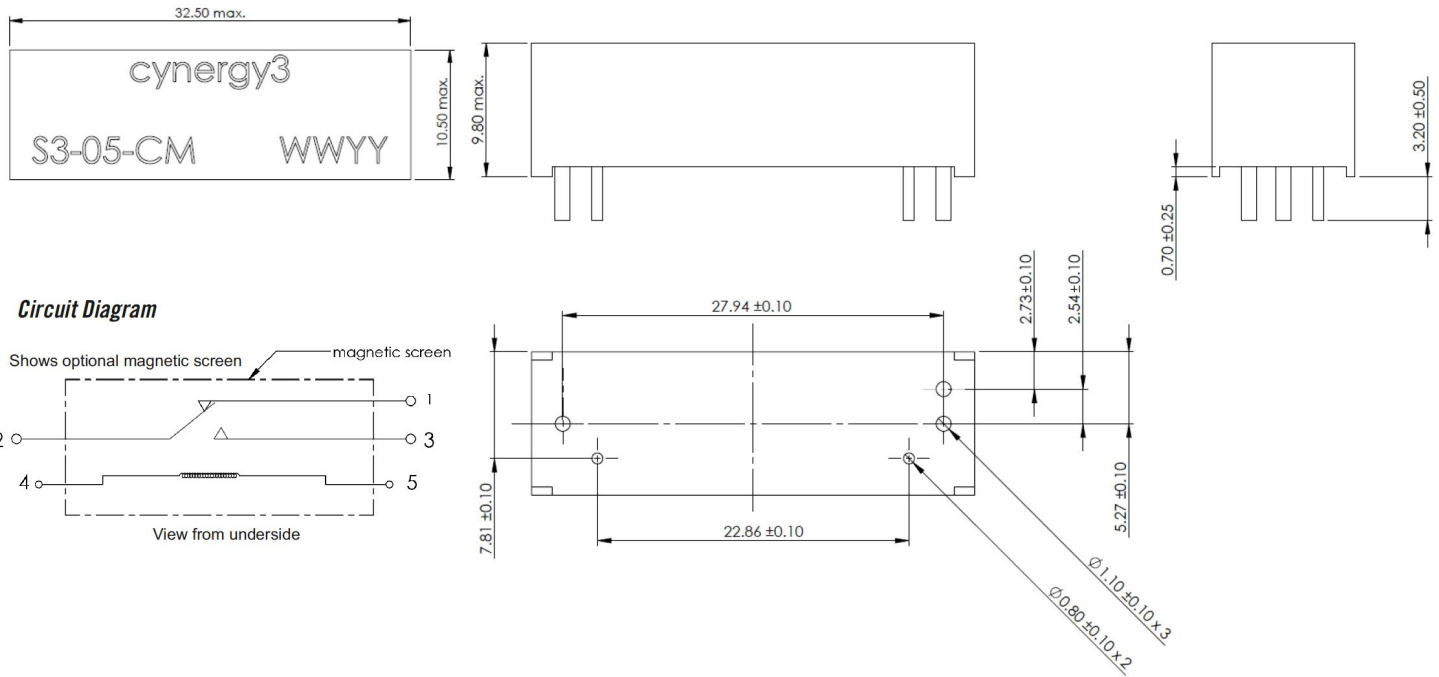
| | Coil Voltage Vdc | Magnetic Screen |
|-----------------|------------------|-----------------|
| S3-05-C | 5 | No |
| S3-05-CM | 5 | Yes |
| S3-12-C | 12 | No |
| S3-12-CM | 12 | Yes |

Please refer to this document for circuit design notes:
<https://www.cynergy3.com/blog/reed-relay-application-notes>



DIMENSIONS

All dimensions are in millimeters.



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