

## Magnecraft

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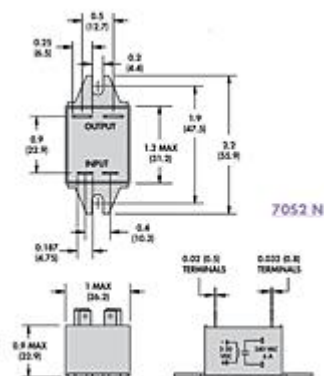
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### Item # 70S2-04-C-12-N, 70S2 Series Solid State Relays/N and S Style

### 70S2 Series Solid State Relays/N and S Style

The 70S2 Series relays have excellent thermal performance and are designed for medium-power loads. Its compact size makes it ideal for designs where space is limited. The design incorporates a triac output for AC loads and MOSFETs for DC loads. Optical isolation protects the control from transients. The 70S2 is available in a combination of screw, fast-on or PCB terminals.



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### SPECIFICATIONS

|                       |               |
|-----------------------|---------------|
| Component Type        | Solid State   |
| Mounting Type         | Panel         |
| Rated Current Load    | 12 A          |
| Contact Configuration | SPST-NO       |
| Control Voltage       | DC            |
| Load Type             | DC            |
| Input Voltage Range   | 3 to 30 VDC   |
| Output Voltage Range  | 24 to 280 VAC |

|                |            |
|----------------|------------|
| Switching Type | Zero Cross |
|----------------|------------|

## OUTPUT CHARACTERISTICS

|  |               |
|--|---------------|
| Switching Device                               | Triac         |
| Current Rating                                 | 12 A          |
| Switching Voltage                              | 24 to 280 VAC |
| Maximum Rate of Rise Off State Voltage [dv/dt] | 300 V/us      |
| Min. Load Current to Maintain On               | 75 / 100 mA   |
| Non-Repetitive Surge Current (1 cycle)         | 60 / 150 A    |
| Max. Off State Leakage Current [rms]           | 6 mA          |
| Minimum Peak Blocking Voltage                  | 600 VAC       |
| Typical On State Voltage Drop [rms]            | 1.6 VAC       |

## INPUT CHARACTERISTICS

|   |             |
|---|-------------|
| Voltage Range                           | 3 to 30 VDC |
| Must Release Voltage                    | 1 VDC       |
| Typical Input Current at 5VDC or 240VAC | 7 to 16 mA  |
| Maximum Reverse Control Voltage         | 3 VDC       |

## PERFORMANCE CHARACTERISTICS

|  |              |
|--|--------------|
| Electrical Life (UL508), Operations at Rated Current (Resistive) | 100000       |
| Mechanical Life, Unpowered                                       | 10000000     |
| Operating Time (Response Time) - On                              | 8.3 ms<br>μs |
| Operating Time (Response Time) - Off                             | 8.3 ms<br>μs |
| Dielectric Strength, Terminals to Chassis                        | 3000 VAC     |

## ENVIRONMENT

|   |                |
|---|----------------|
| Product Certifications, Standard Version              | CSA<br>UR      |
| Ambient Air Temperature around the Device - Storage   | -40 to +125 °C |
| Ambient Air Temperature around the Device - Operation | -40 to +100 °C |

## MISCELLANEOUS CHARACTERISTICS

|                                       |        |
|---------------------------------------|--------|
| Thermal Resistance (Junction to Case) | 4 °C/W |
|---------------------------------------|--------|

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