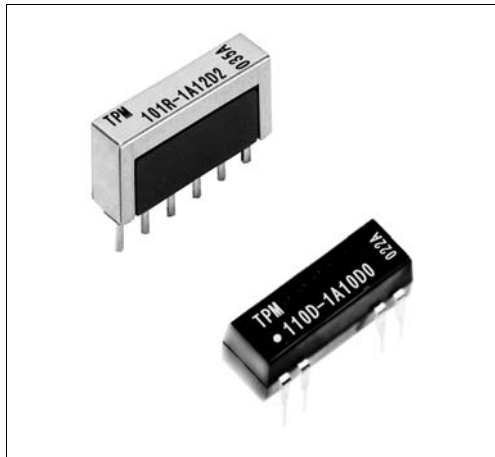


SIP, DIP Reed Relays

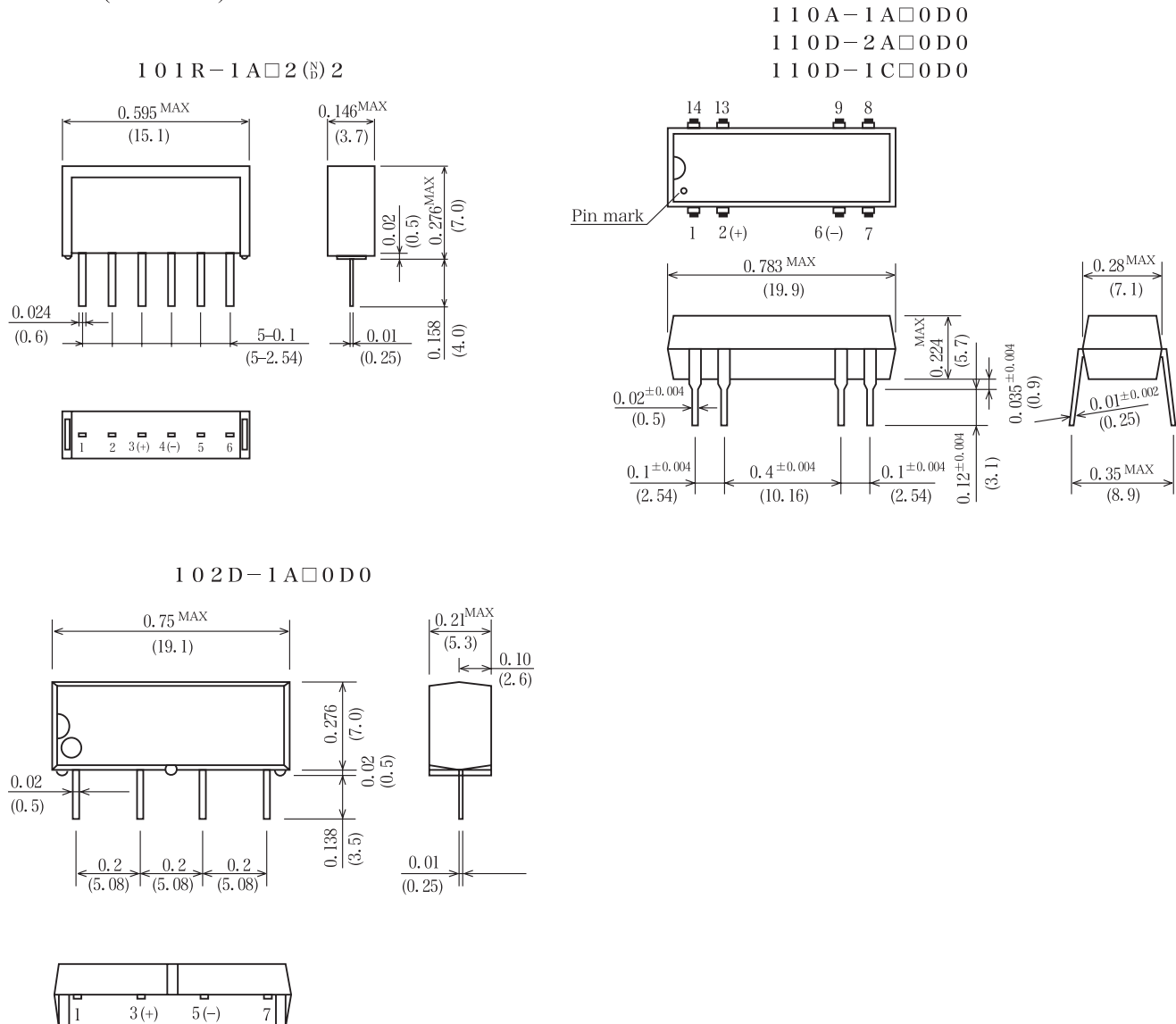


The 100 Series is the standard series for SIP and DIP relays. This product line comes in 1 Form A, 2 form A and 1 form C arrangements.

- Standard SIP and DIP relays IC pitches
- Internal lead-frame design
- High speed operating
- High reliability and long life
- Electric magnetic shield available

Mechanical Dimensions

All dimensions are measured in inches (millimeters).





| 101R,102D,110D Series | | | SIP | | | | DIP | | | | | | | | |
|---|--|----------------------|------------------|-----|------------------|------|------------------|------|------|--------------|-----|------------------|------|-----|------|
| | | | Model Number | | Model Number | | Model Number | | | Model Number | | Model Number | | | |
| | | | 101R-1A□□2□□2 | | 102D-1A□□0D0 | | 110D-1A□□0D0 | | | 110D-2A□□0D0 | | 110D-1C□□0D0 | | | |
| Parameters | Test Condition | Units | 1 Form A | | 1 Form A | | 1Form A | | | 2 Form A | | 1 Form C | | | |
| Coil Specs | | | | | | | | | | | | | | | |
| Nominal coil voltage | | VDC | 5 | 12 | 5 | 12 | 5 | 12 | 24 | 5 | 12 | 24 | 5 | 12 | 24 |
| Coil resistance | ±10% at 20°C | Ω | 375 | 600 | 500 | 1000 | 500 | 1000 | 2150 | 140 | 500 | 2150 | 200 | 500 | 2150 |
| Operating voltage | 15°C~35°C | VDC Max | 4.0 | 9.6 | 3.75 | 9.0 | 3.75 | 9.6 | 19.2 | 3.75 | 9.6 | 18.0 | 3.75 | 9.6 | 18.0 |
| Release voltage | 15°C~35°C | VDC Min | 0.7 | 1.2 | 0.8 | 1.0 | 0.7 | 1.2 | 2.4 | 0.7 | 1.2 | 2.4 | 0.7 | 1.2 | 2.4 |
| Contact Ratings | | | | | | | | | | | | | | | |
| Switching voltage | Max. DC/Peak AC resistance | Volts | 200 | | | | 100 | | | | | 30 | | | |
| Switching current | Max. DC/Peak AC resistance | Amps | 0.5 | | | | 0.5 | | | | | 0.2 | | | |
| Carry current | Max. DC/Peak AC resistance | Amps | 1.2 | | | | 1.0 | | | | | 0.5 | | | |
| Contact rating | Max. DC/Peak AC resistance | Watts | 10 | | | | 10 | | | | | 3 | | | |
| Life expectancy | 1V. 10mA | ×10 ⁶ Cyc | 1500 | | | | 1000 | | | | | 50 | | | |
| Contact resistance | Maximum initial | mΩ | 150 | | | | 150 | | | | | 150 | | | |
| Contact resistance stability | Maximum initial | mΩ | 5.0 | | | | 5.0 | | | | | 5.0 | | | |
| Relay Specifications | | | | | | | | | | | | | | | |
| Insulation resistance | Between all isolated pins at 100V 20°C 40%RH | Ω | 10 ¹² | | 10 ¹⁰ | | 10 ¹⁰ | | | | | 10 ¹⁰ | | | |
| Capacitance | Across open contacts | pF-Max | | | | | | | | | | | | | |
| | Contact to Shield | | | | | | | | | | | | | | |
| Open contact to coil | Shield guarding | VDC | | | | | | | | | | | | | |
| Dielectric strength | Between contacts | | 200 | | 200 | | 200 | | | | | 200 | | | |
| | Contacts to shield, coil | 250 | | 500 | | 500 | | | | | 500 | | | | |
| Operating time (Including. bounce) | At nominal coil voltage, 100Hz Square wave | msec | 0.5 | | 1.0 | | 1.0 | | | | | 2.0 | | | |
| Release time | Diode suppression | msec | 0.5 | | 1.0 | | 1.0 | | | | | 2.5 | | | |
| Environmental Ratings | | Schematics Top view | | | | | | | | | | | | | |
| Measurement reference conditons Temp. : 15°C~35°C Humidity : 25%~85%RH Atmospheric pressure : 860~1060hPa Storage temp. : -40°C~+80°C Operating temp : -20°C~+60°C The operating and Release Voltage and the coil resistance are specified at 20°C. These values change approximately 0.4%/°C change in the ambient temperature. Vibration : 20Gs to 2000Hz Shock : 50Gs | | | | | | | | | | | | | | | |

Notes :

- Values are specified with a resistive load being applied. A contact protective circuit is required for C and L Type loads.
- The values of the operating time and release time however, are when the rated coil voltage is applied and a clamp diode is attached.
- Model 101R-1A□□2D2 : Diode is connected to pin 3 (+) and pin 4 (-).
 Model 102D-1A□□0D0 : Diode is connected to pin 3 (+) and pin 5 (-).
 Model 110D Type : Diode is connected to pin 2 (+) and pin 6 (-).
 Correct coil polarity must be followed.

ORDERING CODE

1 0 1 R - 1 A □ 2 □ 2
 (3) (4)
 1 0 2 D - 1 A □ 0 D 0
 (3)
 1 1 0 D - □ □ □ 0 D 0
 (1) (2) (3)

Example 101R-1A12D2 Represents Series 101R with 1Form A, Dry Reed (Ruthenium), Coil Voltage 5V, Coaxial Shield, Magnetic Shield and with Diode.

- | | |
|--|---|
| (1) Number of capsule 1-1 capsule 2-2 capsules | (3) Coil Voltage 1-5VDC 2-12VDC 3-24VDC (101R, 102D N/A) |
| (2) Contact Form A-Form A C-Form C | (4) Diode Options N-No Diode D-With Diode |