TELEDYNE RELAYS Everywhereyoulook™

MCR4 Series Metal Cover Shielded Reed Relays

MCR4 Series Reed Relays:

The MCR4 Series Reed Relays can switch up to 100W, 5A or 250Vdc. These Reed Switch Relays provide both the consistency and reliability of a sealed reed switch with the convenience of an integrated coil inside a metal cover package. Rhodium switch contacts are hermetically sealed in glass, mounted on an integral lead frame, then sealed in metal cover with magnetic shield to minimize magnetic interference with other relays or other components on PCB. The metal package with terminal pins allows these relays to be soldered directly into a PCB or inserted into sockets for convenient replacement.

Features:

- Hermetically Sealed Rhodium Contacts
- Magnet Shield
- Metal cover with terminal pins
- 1 Form A contacts
- Long Life: > 1,000,000,000 actuations

Applications:

- Automated Test Equipment
- Remote Sensing/Measurement
- Telecommunications
- Security/Access Control
- Industrial Control Systems

| Specifications | | | М | ICR4-1 | A | |
|---|--|---------|--------|--------------------------|----------|--|
| Parameters | Test Conditions Units 1 Form A | | A | | | |
| Coil Characteristics | | | | | | |
| Coil Voltage | Nominal Maximum | Vdc | 6 9 | 12 18 | 24 36 | |
| Coil Resistance | +/- 10%, 20°C | Ω | 250 | 1k | 4k | |
| Operate Voltage | Must Operate by | Vdc Max | 4.4 | 8.8 | 17.6 | |
| Release Voltage | Must Release by | Vdc Min | 1.2 | 2.4 | 4.8 | |
| Contact Characteristic | S | | | | | |
| Contact Material | | | F | Rhodiur | n | |
| Switching Voltage | Max DC/Peak AC | Volts | | 250 | | |
| Switching Current | Max DC/Peak AC | Amps | | 3 | | |
| Carry Current | Max DC/Peak AC | Amps | | 5 | | |
| Contact Rating | Max DC/Peak AC | Watts | | 100 | | |
| Contact Resistance | Maximum | Ω | | 0.05 | | |
| Relay Characteristics | | | | | | |
| Insulation Resistance | Minimum | Ω | | 10 ⁹ | | |
| Dielectric Strengths | Between Contacts Coil to Contact Case to Contact Case to Coil | Volts | | 500 500 500 500 | | |
| Operate Time, Typical (bounces included) | At Nominal Coil Voltage | mSec | | 2.5 | | |
| Release Time, Typical | | mSec | | 0.1 | | |
| Life Expectancy | | | | | | |
| Low Load | Minimum | Ops | | 3.3×10 | 6 | |
| Mechanical Life | Minimum | Ops | | 10 ⁹ | | |
| Environmental Charact | teristics | | | | | |
| Storage Temperature | | °C | -4 | 0 ~ +10 | 00 | |
| Operating Temperature | | °C | | 40 ~ +8 | | |
| Vibration | 10 - 500 Hz | G | | 20 | | |
| Shock | 11 mSec | G | | 100 | | |
| Resonance Frequency | | Hz | | 800 | | |
| Weight | Maximum | Oz | | 1.06 | | |
| weight | WIAXIIIIUIII | 02 | | 1.00 | | |

Please feel free to contact us for more information regarding additional options and custom configurations.