



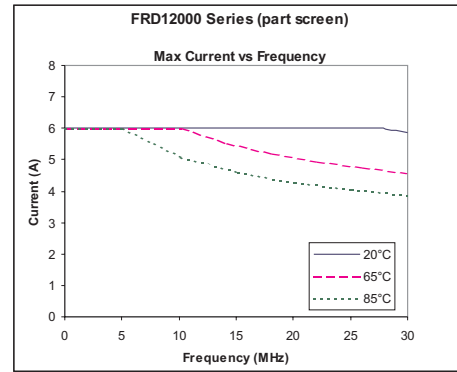
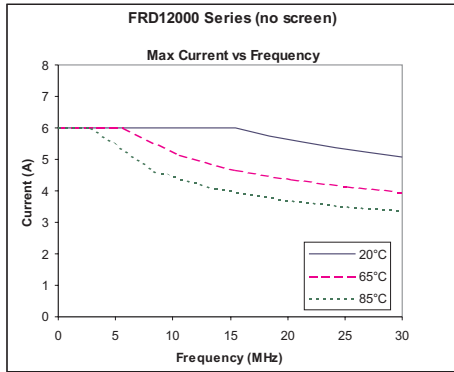
An open frame RF reed relay with 8kV isolation and 6A (at 30MHz) carry current, the FRD12000 series has been used many HF radio system specifications over the years, with applications in commercial maritime (GMDSS) equipment and military HF radio units worldwide. The use of vacuum reed switches with rhodium contacts offers high isolation voltages, low contact resistance and long operating lifetime.

- **Up to 8kVDC Isolation between Contacts**
- **6A Carry Current (up to 30MHz)**
- **Excellent RF Performance**
- **Ideal for Antenna Tuning Units**
- **Form A/B Contact Configuration**
- **Customising Facility**

Available as Form A (SPNO) or Form B (SPNC) contact configurations.

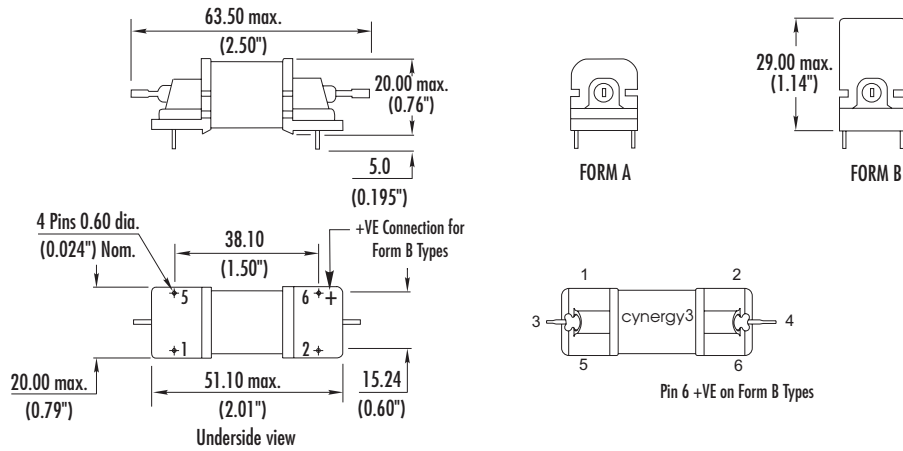
| Contact | Units | Conditions | FRD12015 | FRD12021 | FRD12023 | FRD12049 |
|--|------------|-------------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|
| Action (form A, B or Latching) | | A | A | B | A | B |
| Switching Voltage | V | DC max | 20 | 20 | 20 | 20 |
| Switching Current | A | DC max | 1 | 1 | 1 | 1 |
| Carry Current | A | RMS max | 6 | 6 | 6 | 6 |
| Isolation | kV | DC max | 8 | 8 | 5 | 8 |
| Capacitance | pF | coil/screen gnd | 0.4 | 0.6 | 0.6 | 0.6 |
| Lifetime | operations | dry switching | 10 ⁹ | 10 ⁹ | 10 ⁹ | 10 ⁹ |
| Contact Resistance | mOhms | maximum (typical) | 50 (15) | 50 (15) | 50 (15) | 50 (15) |
| Insulation Resistance | Ohms | minimum (typical) | 10 ¹⁰ (10 ¹³) | 10 ¹⁰ (10 ¹³) | 10 ¹⁰ (10 ¹³) | 10 ¹⁰ (10 ¹³) |
| ESR at 4.5A, 30MHz | mOhms | typical | 100 | 150 | 150 | 150 |
| COIL at 20°C | | | | | | |
| Nominal Working Voltage | VDC | | 24 | 12 | 12 | 24 |
| Must Operate | VDC | max | 15 | 8 | 8 | 14 |
| Must Release | VDC | min | 2 | 2 | 2 | 4 |
| Nominal Resistance | ohms | +/-10% | 1000 | 380 | 480 | 1500 |
| RF Screening | | | Part | - | - | - |
| RF Screening Connection | | pin position | 2 & 5 | 2 & 5 | | |
| Coil Connections | | pin position | 1 & 6 | 1 & 6 | 1 & 6 | 1 & 6 |
| RELAY | | | | | | |
| Operate time (including bounce) | ms | | 2 | 3 | 3 | 3 |
| Release time | ms | | 1 | 2 | 1 | 2 |
| Isolation contact to all other terminals | kV | DC max | 10 | 10 | 10 | 10 |
| Isolation coil to screen | kV | DC max | 0.5 | N/A | N/A | N/A |
| Capacitance contact to all other terms | pF | contacts open | 2.0 | 2.5 | 1.5 | 2.5 |
| ENVIRONMENTAL | | | | | | |
| Storage temperature range | °C | | | -55 to +125 | | |
| Operating temperature range | °C | Limited current* | | -40 to +85 | | |
| Shock | g | 11ms 1/2 sine pk | | 100 | | |
| Bump | g | 6ms 1/2 sine pk | | 40 | | |
| Vibration | g | 10- 500Hz | | 10 | | |
| Weight | gm | | 24 | 33 | 24 | 33 |

see graphical data.



Mechanical Dimensions

All dimensions are in millimeters (inches)



ISO9001 Certified

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