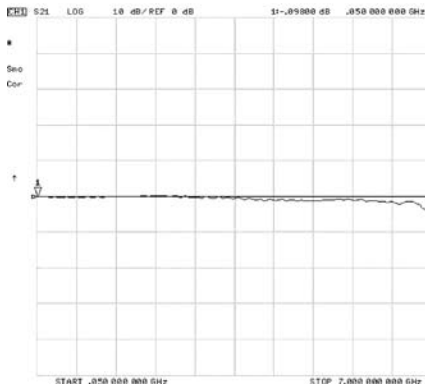


**7 GHz High Frequency Reed Relay
for 50 Ω Impedance**

RELAY DATA

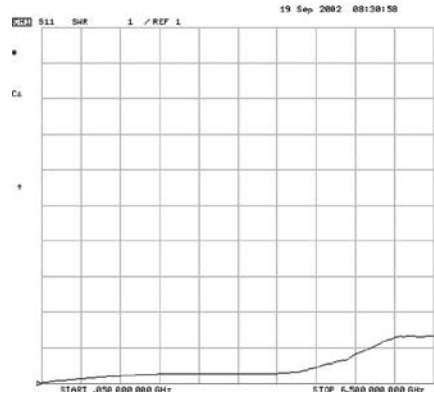
| All Data at 20° C | Switch Model → Contact Form → | Contact 80 Form A | | | Units |
|---|--|--------------------------------------|--------------------------------------|------|---------------------------|
| | Conditions | Min. | Typ. | Max. | |
| Contact Ratings | Any DC combination of V & A not to exceed their individual max.'s. | | | 10 | W |
| Switching Voltage | DC or peak AC | | | 170 | V |
| Switching Current | DC or peak AC | | | 0.5 | A |
| Carry Current | DC or peak AC | | | 0.5 | A |
| Bulk Resistance | Through all plated material on substrate | | 200 | 350 | mΩ |
| Static Contact Resistance | w/ 0.5 V & 50 mA | | 75 | 100 | mΩ |
| Dynamic Contact Resistance | Measured w/ 0.5 V & 50mA | | 100 | 150 | mΩ |
| Insulation Resistance (100 Volts applied) | Across Contact Contact to coil and shield | 10 ¹⁰ 10 ¹³ | 10 ¹² 10 ¹⁴ | | Ω |
| Breakdown Voltage | Across Contact Coil to contact | 210 1500 | | | VDC |
| Operate Time incl. Bounce | Measured w/ nominal voltage | | | 0.1 | ms |
| Release Time | No coil suppression | | | 0.02 | ms |
| Capacitance (@ 10 kHz) | Across Contact Contact to coil and shield | | 0.1 0.7 | | pF |
| Life Expectancies | | | | | |
| Switching 5 V - 10mA | DC <10 pF stray cap. | | 1000 | | 10 ⁶ Cycles |
| For other load requirements, see the life test section on P. 120. | | | | | |
| Environmental Data | | | | | |
| Shock Resistance | 1/2 Sine wave duration for 11 ms | | | 50 | g |
| Vibration Resistance | From 10 - 2000 Hz | | | 10 | g |
| Ambient Temperature | 10 °C/ minute max. allowable | -40 | | 125 | °C |
| Storage Temperature | 10 °C/ minute max. allowable | -55 | | 125 | °C |
| Soldering Temperature | 5 sec. dwell | | | 260 | °C |
| Material of Case | Themosect / Ceramic | | | | |
| Material of pads | Au plated | | | | |

Insertion Loss:



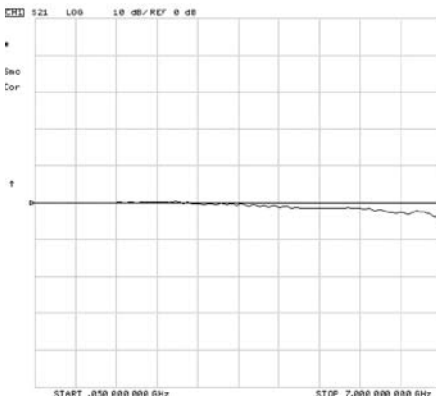
Insertion loss tested to 7 GHz for the CRF Reed Relay. Horizontal full scale: 7.0 GHz. Vertical scale: 10 dB/div referenced from the 0 mark.

VSWR:



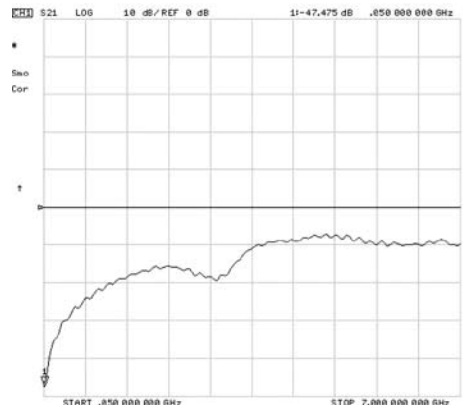
Voltage Standing Wave Ratio (VSWR) tested to 6.5 GHz for the CRF Reed Relays. Horizontal full scale: 6.5 GHz. Vertical scale: 1.0/div referenced from the bottom line 1.0 mark.

Copper Wire Insertion Loss:



Insertion loss tested to 7 GHz for the CRF Reed Relay but with the internal Reed Switch replaced with a bare copper wire. Horizontal full scale: 7.0 GHz. Vertical scale: 10 dB/div referenced from the 0 mark.

Isolation:



Isolation tested to 7 GHz for the CRF Reed Relay. Horizontal full scale: 7.0 GHz. Vertical scale: 10 dB/div referenced from the 0 mark.