Model — RFS 070 Part No. RFS00702FDA000

RF Sensing Switch

General Description:

The RFS00702FDA000 RF Sensing Switch provides two (2x1) RF detector switches in a single RU enclosure. Each of the RF sensing switches utilizes a DPDT RF relay to switch either the primary or secondary signal input to the output. The pilot frequency is coupled from the primary signal input, filtered, amplified, and detected to operate the relay. When the input level is above a preset threshold, which is adjustable using the front panel potentiometer, the relay is deenergized and the primary signal path is selected. When the signal falls below the preset threshold, the relay is energized and the secondary signal path is selected.

Specifications:

Overall RF Range: 5-1000 MHz

Impedance: 75 ohm

Detected Pilot Frequency: 70 ± 18 MHz

Level: -50 to -20 dBm

Insertion Loss: 0.5 dB

Return Loss: 14 dB (input & output)

Isolation: 40 dB

Manual Override: Contact closure to ground

Threshold Adjust: Front panel potentiometer

Alarm: Form 'C' contact closure

Power Requirements: -48 VDC

RF Connectors: Type "F", 75 ohm

Mechanical: 1 RU (1.75" H x 19" W x 12.5" D)





Operation and Adjustment Procedure:

- 1. Connect the corresponding signal cables to the PRIMARY, SECONDARY, and OUTPUT connectors on the RFS00702FDA000 unit.
- 2. Ensure that normal operating signal level is present at the PRIMARY port.
- 3. If the front panel "ALARM" light is on, slowly turn the "LEVEL SET" potentiometer in a counter clockwise direction until the "ALARM" light goes off and remains off.
- 4. If the "ALARM" light is initially off, slowly turn the "LEVEL SET" potentiometer in a clockwise direction until the light turns on, then turn the potentiometer back until the LED extinguishes.
- 5. This is the threshold switch point.

NOTE: The "RF SWITCH" modules are identified from left to right as #1 and #2 when looking at the front and rear panels of the RFS00702FDA000.

