## SWITCHING

### 1.3GHz RF Multiplexer Module Model 1260-54



- Configured as Six 1x4 Tree Multiplexers
- Ideal for VHF/UHF Matrix Building Block
- Excellent Crosstalk, Isolation and VSWR ■ Optional Termination of Input Signals Performance to 1.3 GHz
- Low Noise Performance Supports Switching of Low-level RF Signals

Model 1260-54 is ideal for high-performance RF applications. The tree configuration eliminates the effect of unterminated stubs which would otherwise severely limit bandwidth performance. Unused inputs may be terminated into optional on-board $50 \Omega$ impedances.

The 1260-54 can be used for switching signals from oscilloscopes, spectrum, network or distortion analyzers to a unit under test. The module consists of six independent banks of channels configured as $1 \times 4$ multiplexers.

Only one connection at a time can be made to each common bus. Unused inputs may be terminated into optional terminators (purchased separately). There is also a fifth, no connect, position for each bank for situations when no signal is desired on the common bus.

Relay coil current monitoring is available to provide confidence checking. This gives the user assurance of proper relay operation.

The $1260-54$ is controlled by the Option 01 message-based interface which is explained in detail on the Smart Card Module page. All 1260 control features explained on that page are available to this module.

## 1260-54C/D Specifications

Maximum Switchable Voltage
(Signal-Ground) 30VDC or 100VACrms
Maximum Switchable Current
Per Channel: 1.5ADC or ACrms
Maximum Switchable Power
Per Channel: 60W DC, 60VA, 150W@100MHz, 70W @ 500MHz, 40W @ 1GHz

## DC PERFORMANCE

Path Resistance
$1.0 \Omega$
Thermal EMF
$<40 \mu \mathrm{~V}$
DC Isolation $>10^{-8} \Omega$
AC PERFORMANCE (into $50 \Omega$ )
Bandwidth (-3dB) 1.3 GHz

Insertion Loss $100 \mathrm{MHz}:<0.5 \mathrm{~dB}$ $500 \mathrm{MHz}:<1.5 \mathrm{~dB}$ 1GHz: <2.0dB
Crosstalk Across Groups
100MHz: <-100dB
500MHz: <-80dB
$1 \mathrm{GHz}:<-60 \mathrm{~dB}$
1.3 GHz : <-50dB

Isolation Between Channels
$100 \mathrm{MHz}:<-80 \mathrm{~dB}$
500MHz: <-65dB
$1 \mathrm{GHz}:<-55 \mathrm{~dB}$
1.3 GHz : <-40dB

VSWR
100MHz: 1.1:1
500MHz: 1.25:1
$1 \mathrm{GHz}: \quad 1.75: 1$
1.3GHz: $\quad 1.75: 1$

## VXIbus INTERFACE DATA

## Cooling Requirements

Airflow: 1.0 liters/sec
Backpressure: $0.05 \mathrm{~mm} \mathrm{H}_{2} 0$
With Option 01S/T
Airflow: 2.0 liters/sec
Backpressure: $0.2 \mathrm{~mm} \mathrm{H}_{2} \mathrm{O}$
Power Requirements
$+5 \mathrm{~V}: 0.4 \mathrm{~A}$ (2.8A with Option 01 installed)
$+12 \mathrm{~V}: 10 \mathrm{~mA}$ per relay (energized)
Weight
$2.59 \mathrm{lb}(1.17 \mathrm{~kg})$ without Option 01
$2.87 \mathrm{lb}(1.29 \mathrm{~kg})$ with Option 01

## Dimensions

C-size, Single-slot VXIbus Module
User Connector
SMC (not supplied)
Terminations
SMB (not supplied)
Typical Programming Syntax
Programming Syntax is in the
"<module address> . <channel>"
Example: CLOSE 3.02. This
CLOSE statement will close channel number 2 on the 126054 at card address 3.

The CE Mark indicates that the product has completed and passed rigorous testing in the area of RF Emissions, Immunity to Electromagnetic Disturbances and complies with European electrical safety standards.

| ORDERING INFORMATION |  |  |
| :---: | :---: | :---: |
| Model | Description | Part Number |
| $1260-54$ | Six 1×4 Trees 1.3GHz can be terminated | 404768 |
| 404664 | 50 ohm terminator (kit of 4) order separately | 404664 |
| Option 01* | Smart Card Module (installed) | OPT-401901-005 |
| *One Option 01 must be ordered with switch system. Please specify the card on which Option 01 will be installed. |  |  |


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