

Wideband universal RF switch matrix

8x8 RF Switch Matrix is designed for frequency range up to 6.0 GHz and RF power level up to 2.5W. Device input and output ports are matched into 50Ω.

Features:

- Excellent Insertion Loss
- Excellent VSWR
- High Linearity and Isolation
- Absorptive switch design
- 3V and 5V operation
- Control options
 - I/O
 - USB
 - RS485
- Customized solution upon request
 - RF connector allocation
 - DC supply
 - Control interface
 - Optimized Insertion or Return Loss



Applications:

- ATE environment
- Cellular and Wireless applications
- Filter bank selector
- Transceiver systems

Options:

| | |
|------------------------------------------|-----------------|
| Excellent insertion loss, very good VSWR | opt. 101 |
| Excellent VSWR, very good insertion loss | opt. 102 |

Absolute maximum ratings:

| | Minimum | Maximum |
|-----------------------|---------|---------------------------------|
| Supply voltage | 3.2V | 5.5V |
| Control voltage | 3.2V | 5.5V |
| RF power input | - | +30@70-400MHz +34@0.4-6.0GHz |
| Operating temperature | -40°C | +85°C |

Technical specifications:

| | Opt. 101 | Opt. 102 | Opt. 101 | Opt. 102 | Opt. 101 | Opt. 102 |
|--------------------------------------|------------------------------------------|----------|-------------|----------|------------|----------|
| Frequency range | 1MHz-0.4GHz | | 0.4-4.0 GHz | | 4.0-6.0GHz | |
| Input impedance | 50 ohm | | | | | |
| Insertion loss | <4.5 dB | <6.3 dB | <5.8 dB | <7.7 dB | <6.6dB | <8.5dB |
| Return Loss | >10dB | >18dB | >18dB | >20dB | >15dB | >17dB |
| Isolation (RFC to open port) | >50 dB | | >40 dB | | >35 dB | |
| Input 1dB compression, typ. | +30 dBm | | +34 dBm | | +34 dBm | |
| Input IP3, typ. | +60dBm | | +60dBm | | +60dBm | |
| Switching time | <20µsec | | | | | |
| Supply voltage, Vdd nominal | +3.3V | | | | | |
| RF connectors | 16x SMA-female | | | | | |
| DC and CTRL connector | Type according to customer specification | | | | | |
| Case dimensions (without connectors) | 160x150x17mm | | | | | |