Ducommun Overview
With more than 125 years of combined design experience, our engineering team is well suited to design and manufacture products from component level through complete integrated assemblies. Ducommun DC to 46 GHz coaxial switches provide reliable performance for applications ranging from communications, defense, and research center laboratories.

Applications
• Radar systems
• Communications
• Electronic warfare
• Navigation systems

Standard Specifications
• RF impedance: 50 ohm nominal
• Temperature range: -35°C to +85°C
• Operating life: 1,000,000 cycles
• Switching time: 15mSec (max)
• Switching sequence: break before make
• Environmental: designed in accordance to MIL-DLT-3928 (test and operation modes)

Series
• SPDT - DL1 series
• Transfer - TL4 series
• Multi-throw - QL series

For more information, contact our sales team at 310.513.7200 or rfales@ducommun.com
DL1 Series - SPDT 46 GHz Switch

Specifications

General Specifications
- Actuating Voltage: 12VDC ± 10%
- Actuating Current: 260 mA (max) at 12VDC & 72°F
- Switching Time: 15 ms (max)
- RF Power: Average 10 watts
- Operating Mode: Failsafe

<table>
<thead>
<tr>
<th>Frequency (GHz)</th>
<th>VSWR (max.)</th>
<th>Insertion Loss (dB max.)</th>
<th>Isolation (dBmax.)</th>
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<tbody>
<tr>
<td>DC - 6</td>
<td>1.30</td>
<td>0.30</td>
<td>70</td>
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<tr>
<td>6 - 12</td>
<td>1.40</td>
<td>0.40</td>
<td>60</td>
</tr>
<tr>
<td>12 - 18</td>
<td>1.50</td>
<td>0.50</td>
<td>60</td>
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<tr>
<td>18 - 26.5</td>
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<td>0.70</td>
<td>55</td>
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<tr>
<td>26.5 - 46</td>
<td>1.90</td>
<td>0.80</td>
<td>50</td>
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</table>

Outline Drawing

TL4 Series - Transfer 46 GHz Switch

Specifications

General Specifications
- Actuating Voltage: 24 - 30 VDC
- Actuating Current: 280 mA (max) at 28VDC & 20°C
- Switching Time: 20 ms (max)
- RF Power: Average 3 watts
- Operating Mode: Latching with indicating circuitry, self de-energizing circuitry, and suppression diodes

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<td>0.70</td>
<td>55</td>
</tr>
<tr>
<td>26.5 - 40</td>
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</tr>
<tr>
<td>40 - 46</td>
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</table>
QL Series 1P3T - 1P6T 46 GHz Switch

Specifications

General Specifications

Actuating Voltage 24 - 30 VDC (28VDC) nominal
Actuating Current 200 mA (max) at 28VDC & 72°F
Switching Time 15 ms (max)
RF Power Average 3 watts at 40GHz
Operating Mode Normally open

<table>
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<th>Insertion Loss (dB max.)</th>
<th>Isolation (dB max.)</th>
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<tr>
<td>26.5 - 40</td>
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<tr>
<td>40 - 46</td>
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<td>1.5</td>
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About Ducommun

Ducommun is a key supplier of microwave and millimeter wave components and subassemblies to our customers throughout the world. Ducommun has been making RF products since 1969, first as Dynatech (DMT) and then expanding our product offering with the acquisitions of DBP Microwave and WiseWave Technologies.

We have designs for commercial aircraft, military aircraft, defense, industrial, medical, SATCOM, telecommunications and test and measurement applications.

Products

- Amplifiers
- Waveguide detectors
- Horn antennas
- Frequency extenders
- Circulators / Isolators
- Attenuators
- Adapters and transitions
- Electromechanical switches
- Coaxial switch matrices
- Integrated switch matrices
- Hi-rel coaxial switches

Vision

At Ducommun, our vision is to be our customers’ #1 provider of innovative electronics and structures solutions.