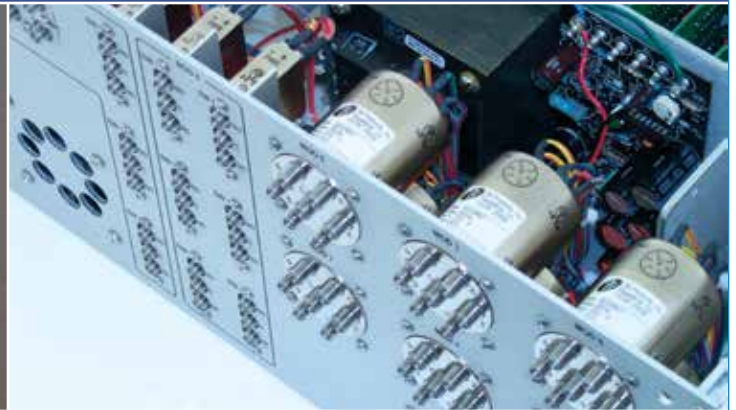


# DC to 40 GHz Coaxial Switches

## RF / MICROWAVE



### Ducommun Coaxial Switch Heritage

Ducommun's coaxial switch heritage began with Jay-El and Dynatech (DMT), founded in 1969 and acquired by the company in the early 1990's. To further strengthen its product offering, Ducommun subsequently acquired DB Products (DBP) in 2004 and WiseWave Technologies in 2006.

Today Ducommun serves the avionics, commercial, industrial, defense, medical, telecommunications and space up-link & down-link market sectors with a wide range of coaxial switch products.

Customers choose Ducommun's switch products for our unique and comprehensive understanding of electromechanical switch principals, along with a singular dedication to reliability, quality and customer care.



DK1 Series



TK4 Series



DK3 Series



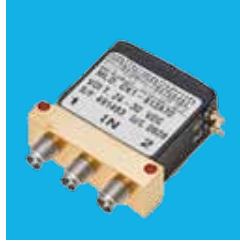
QK Series

## SPDT-40 GHz Switch - DK1 Series

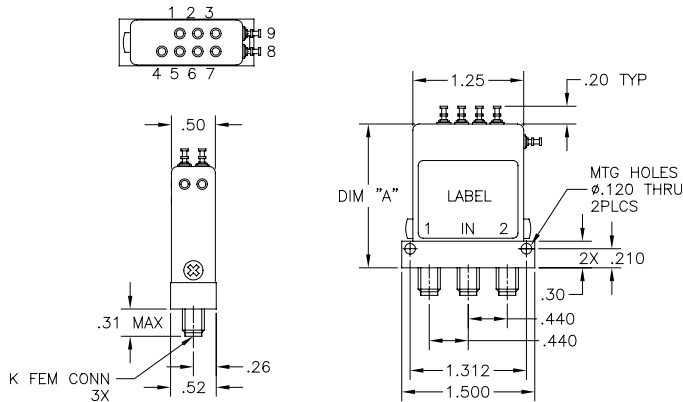
The DK1 series features K connectors and a frequency range of DC to 40 GHz.

This series is available with failsafe, latching self-cut-off or pulse latching functions.

Contact factory for  
RoHS compliant version



<b>RF Impedance:</b>	50 ohms nominal
<b>Temperature Range:</b>	-35°C to +85°C
<b>Operating Life:</b>	1,000,000 cycles
<b>Switching Time:</b>	15 mSec max
<b>Switching Sequence:</b>	Break before make
<b>Environmental:</b>	Designed in accordance to MIL-DTL-3928 (testing and operation modes)



### Specifications

Frequency	VSWR (max.)	Insertion Loss (dB max.)	Isolation (dB min.)
DC-6 GHz	1.30	0.30	70
6-12 GHz	1.40	0.40	60
12-18 GHz	1.50	0.50	60
18-26.5 GHz	1.70	0.70	55
26.5-32 GHz	1.90	0.80	50
32-40 GHz	2.00	1.00	50

Actuator Current (typical)	12 Vdc	12-15 Vdc	20-24 Vdc	24-30 Vdc
Failsafe	240mA	300mA	200mA	140mA
Latching	141mA	176mA	109mA	88mA

## Transfer-40 GHz Switch - TK4 Series

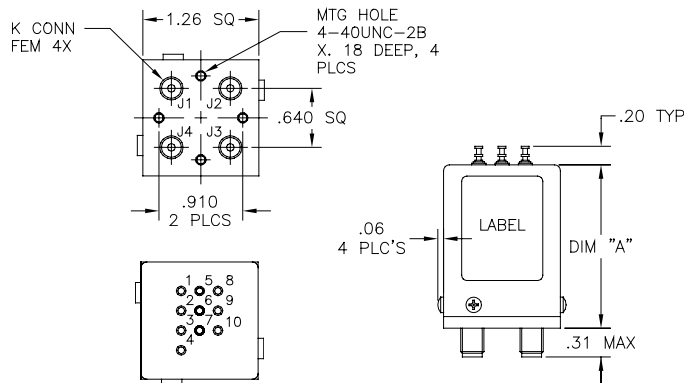
The TK4 series features K connectors and a frequency range of DC to 40 GHz.

This series is available with failsafe, latching self-cut-off or pulse latching functions.

Contact factory for  
RoHS compliant version



<b>RF Impedance:</b>	50 ohms nominal
<b>Temperature Range:</b>	-35°C to +85°C
<b>Operating Life:</b>	1,000,000 cycles
<b>Switching Time:</b>	15 mSec max
<b>Switching Sequence:</b>	Break before make
<b>Environmental:</b>	Designed in accordance to MIL-DTL-3928 (testing and operation modes)



### Specifications

Frequency	VSWR (max.)	Insertion Loss (dB max.)	Isolation (dB min.)
DC-6 GHz	1.30	0.30	70
6-12 GHz	1.40	0.40	60
12-18 GHz	1.50	0.50	60
18-26.5 GHz	1.70	0.70	55
26.5-40 GHz	2.00	1.00	50

Actuator Current (typical)	12 Vdc	12-15 Vdc	20-24 Vdc
Failsafe	480mA	480mA	330mA
Latching	280mA	280mA	270mA

For dimension "A", or if reduced coil current is required, please contact [rfsales@ducommun.com](mailto:rfsales@ducommun.com).

## SPDT-40 GHz Switch - DK3 Series

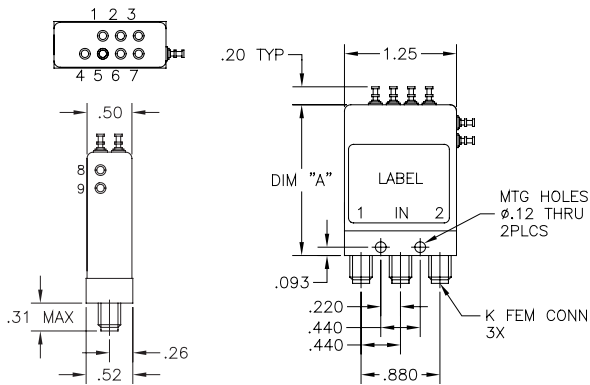
The DK3 series features K connectors and a frequency range of DC to 40 GHz.

This series is available with failsafe, latching self-cut-off or pulse latching functions.

Contact factory for  
RoHS compliant version



<b>RF Impedance:</b>	50 ohms nominal
<b>Temperature Range:</b>	-35°C to +85°C
<b>Operating Life:</b>	1,000,000 cycles
<b>Switching Time:</b>	15 mSec max
<b>Switching Sequence:</b>	Break before make
<b>Environmental:</b>	Designed in accordance to MIL-DTL-3928 (testing and operation modes)



## Specifications

Frequency	VSWR (max.)	Insertion Loss (dB max.)	Isolation (dB min.)
DC-6 GHz	1.30	0.30	70
6-12 GHz	1.40	0.40	60
12-18 GHz	1.50	0.50	60
18-26.5 GHz	1.70	0.70	55
26.5-32 GHz	1.90	0.80	50
32-40 GHz	2.00	1.00	50

Actuator Current (typical)	12 Vdc	12-15 Vdc	20-24 Vdc	24-30 Vdc
Failsafe	240mA	300mA	200mA	140mA
Latching	141mA	176mA	109mA	88mA

## Multi-Position-40 GHz Switch - QK Series

The QK series features K connectors and a frequency range of DC to 40 GHz.

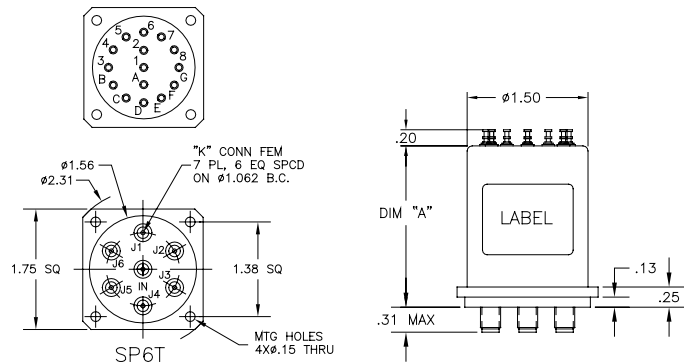
This series is available with normally open function.

This switch is also available in a terminated version with latching self-cut-off function.



Contact factory for RoHS compliant version

<b>RF Impedance:</b>	50 ohms nominal
<b>Temperature Range:</b>	-35°C to +85°C
<b>Operating Life:</b>	1,000,000 cycles
<b>Switching Time:</b>	15 mSec max
<b>Switching Sequence:</b>	Break before make
<b>Environmental:</b>	Designed in accordance to MIL-DTL-3928 (testing and operation modes)



## Specifications

Frequency	VSWR (max.)	Insertion Loss (dB max.)	Isolation (dB min.)
DC-6 GHz	1.30	0.20	70
6-12 GHz	1.40	0.40	60
12-18 GHz	1.50	0.50	60
18-26.5 GHz	1.70	0.70	55
26.5-40 GHz	2.00	1.00	50

Actuator Current (typical)	12 Vdc	12-15 Vdc	20-24 Vdc	24-30 Vdc
Normally Open	180mA	180mA	130mA	140mA

For dimension "A", or if reduced coil current is required, please contact [rfsales@ducommun.com](mailto:rfsales@ducommun.com).

## About Ducommun Incorporated

Ducommun is a global provider of manufacturing and engineering services, developing innovative electronic, engineered and structural solutions for complex applications in aerospace, defense and industrial markets. Our full-service collaborative approach, broad capabilities and value-added services like new product introduction, supply chain strategies and program management deliver value for our customers and innovative solutions for their complex electronic and structural needs.

Ducommun operates manufacturing and engineering facilities in the U.S. and Thailand with quality systems certified to FAA, NASA, ISO 9001:2008, AS9100 REV C, and ANSI/ESD S20.20-2007 standards.

## Vision

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

## Core Values

- Honesty
- Professionalism
- Respect
- Trust
- Teamwork

## THE DUCOMMUN WAY

Honesty • Professionalism • Respect • Trust • Teamwork



## Our Locations

