

MC3-S18

1P6T, SMA, DC-18GHz

MC3n: n=3-6 (e.g., n=6 for 1P6T)

NORMALLY OPEN

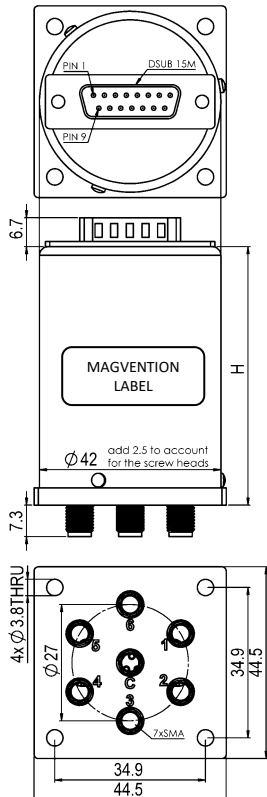
The **MC3-S18** Series features SMA connectors and an operation frequency range of DC to 18 GHz. This series is of normally open type. Options include TTL, coil suppression diodes, indicators etc. The product is typically supplied with a 15-pin male D-sub control interface.



Specifications					
Contact Material	Plated Au				
Switching Sequence	Break before Make				
Switching Time (max)	15msec				
Impedance	50Ω				
Temperature Range	-25°C to +65°C (Standard) -55°C to +85°C ("e" option)				
Relative Humidity	5 to 85%				
Operation Life (cycles)	1,000,000 (Standard)				
Vibration (operating)	10G RMS, 20-2000Hz				
Mechanical Shock (non-operating)	50G, 1/2 Sine, 11msec				
Weight (approx.)	190g				
Voltage (VDC)		12	18	24	28
Current (mA)	NORMALLY OPEN	290	190	150	140

Frequency Range (GHz)	VSWR (max)	Insertion Loss (dB) (max)	Isolation (dB) (min)
DC-6	1.3	0.3	70
6-12	1.4	0.4	60
12-18	1.5	0.5	60

Other options are available upon request.



Optional Indicator Specifications

Max withstand voltage: 60V
Max current capacity: 100mA
Max "ON" resistance: 16Ω

Note: +VDC and -C must be connected to operate.

- MC33-, 1P3T SWITCH
- MC34-, 1P4T SWITCH
- MC35-, 1P5T SWITCH
- MC36-, 1P6T SWITCH

1PnT PORT CONFIGURATIONS

1PnT	Ports Used					
1P6T	1	2	3	4	5	6
1P5T	1	2	3	4	5	
1P4T	1	2	4	5		
1P3T	1	3	5			

Note: "Blank" represents the unused RF and corresponding control ports.

H = 62 mm (max)
H = 72 mm (max) for options with TTL and/or self cutoff

(A low profile version of this product is available upon request)

Mechanical drawings (unit: mm, tolerance +/-0.5mm).

NORMALLY OPEN 15-PIN D-SUB PINOUT

Pin No.	PINOUT
n=1-6	Vn (Jn-COM)
7	COM(-)
8	1 (IND: J1-C)
9	2 (IND: J2-C)
10	3 (IND: J3-C)
11	4 (IND: J4-C)
12	5 (IND: J5-C)
13	6 (IND: J6-C)
14	COM_I
15	+VDCI

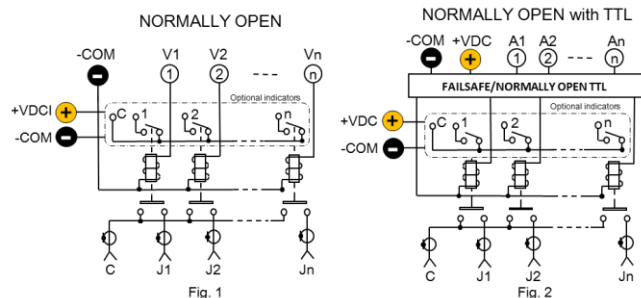
PIN 8-15: For optional INDICATORS only.

NORMALLY OPEN TTL 15-PIN D-SUB PINOUT

Pin No.	PINOUT
n=1-6	An (Jn-COM)
7	COM(-)
8	1 (IND: J1-C)
9	2 (IND: J2-C)
10	3 (IND: J3-C)
11	4 (IND: J4-C)
12	5 (IND: J5-C)
13	6 (IND: J6-C)
14	COM_I
15	+VDC

PIN 8-14: For optional INDICATORS only.

Pin 1-6: The corresponding control signal inputs.



MC3-K40

1P6T, K, DC-40GHz

MC3n: n=3-6 (e.g., n=6 for 1P6T)

NORMALLY OPEN

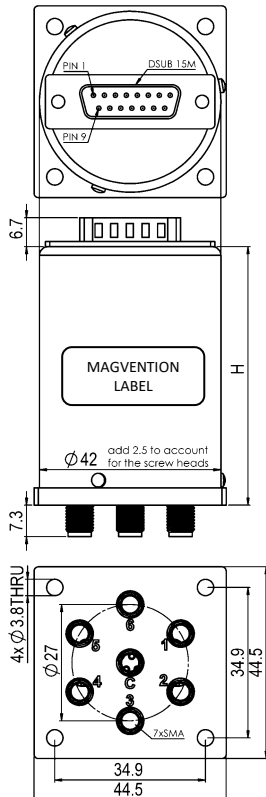
The **MC3-K40** Series features K connectors and an operation frequency range of DC to 40 GHz. This series is of normally open type. Options include TTL, coil suppression diodes, indicators etc. The product is typically supplied with a 15-pin male D-sub control interface.



Specifications					
Contact Material	Plated Au				
Switching Sequence	Break before Make				
Switching Time (max)	15msec				
Impedance	50Ω				
Temperature Range	-25°C to +65°C (Standard) -55°C to +85°C ("e" option)				
Relative Humidity	5 to 85%				
Operation Life (cycles)	1,000,000 (Standard)				
Vibration (operating)	10G RMS, 20-2000Hz				
Mechanical Shock (non-operating)	50G, 1/2 Sine, 11msec				
Weight (approx.)	190g				
Voltage (VDC)		12	18	24	28
Current (mA)	NORMALLY OPEN	290	190	150	140

Standard			
Frequency Range (GHz)	VSWR (max)	Insertion Loss (dB) (max)	Isolation (dB) (min)
DC-6	1.3	0.3	70
6-12	1.4	0.4	60
12-18	1.5	0.5	60
18-26.5	1.9	0.8	50
26.5-40	2	1	50

Other options are available upon request.



Optional Indicator Specifications

Max withstand voltage: 60V
Max current capacity: 100mA
Max "ON" resistance: 16Ω

Note: +VDC and -C must be connected to operate.

- MC33-,1P3T SWITCH
- MC34-,1P4T SWITCH
- MC35-,1P5T SWITCH
- MC36-,1P6T SWITCH

1PnT PORT CONFIGURATIONS

1PnT	Ports Used					
1P6T	1	2	3	4	5	6
1P5T	1	2	3	4	5	
1P4T	1	2		4	5	
1P3T	1		3		5	

Note: "Blank" represents the unused RF and corresponding control ports.

H = 62 mm (max)
H = 72 mm (max) for options with TTL and/or self cutoff

(A low profile version of this product is available upon request)

Mechanical drawings (unit: mm, tolerance +/-0.5mm).

NORMALLY OPEN 15-PIN D-SUB PINOUT

Pin No.	PINOUT
n=1-6	Vn (Jn-COM)
7	COM(-)
8	1 (IND: J1-C)
9	2 (IND: J2-C)
10	3 (IND: J3-C)
11	4 (IND: J4-C)
12	5 (IND: J5-C)
13	6 (IND: J6-C)
14	COM_I
15	+VDCI

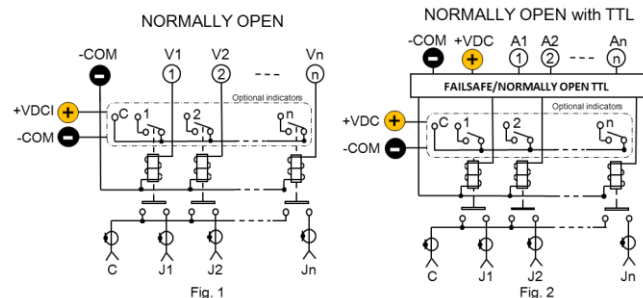
Pin 8-15: For optional INDICATORS only.

NORMALLY OPEN TTL 15-PIN D-SUB PINOUT

Pin No.	PINOUT
n=1-6	An (Jn-COM)
7	COM(-)
8	1 (IND: J1-C)
9	2 (IND: J2-C)
10	3 (IND: J3-C)
11	4 (IND: J4-C)
12	5 (IND: J5-C)
13	6 (IND: J6-C)
14	COM_I
15	+VDC

Pin 8-14: For optional INDICATORS only.

Pin 1-6: The corresponding control signal inputs.



MC3 -S

short, 1P6T, SMA, DC-18GHz

MC3n-SxxNxx-s: n=3-6 (e.g., n=6 for 1P6T), short (low profile version)

Normally Open

The **MC3-S18** Series features SMA connectors and an operation frequency range of DC to 18 GHz. This series is of normally open type. Options include TTL, coil suppression diodes, indicators etc. The product is typically supplied with a 15-pin male D-sub control interface.



Specifications

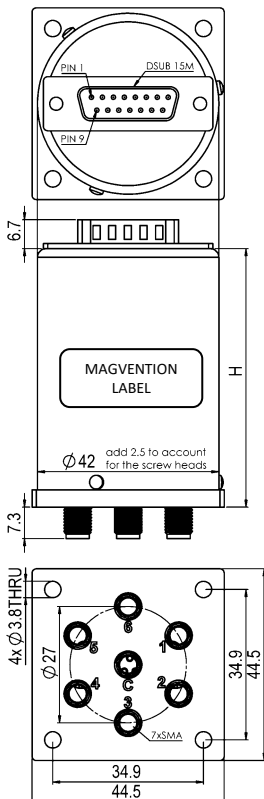
Contact Material	Plated Au
Switching Sequence	Break before Make
Switching Time (max)	15msec
Impedance	50Ω
Temperature Range	-25°C to +65°C (Standard) -55°C to +85°C ("e" option)
Relative Humidity	5 to 85%
Operation Life (cycles)	1,000,000 (Standard)
Vibration (operating)	10G RMS, 20-2000Hz
Mechanical Shock (non-operating)	50G, 1/2 Sine, 11msec
Weight (approx.)	190g

Voltage (VDC)		12	18	24	28
Current (mA)	NORMALLY OPEN	300	210	170	150

Frequency Range (GHz)	VSWR (max)	Insertion Loss (dB) (max)	Isolation (dB) (min)
DC-6	1.3	0.3	70
6-12	1.4	0.4	60
12-18	1.5	0.5	60

Other options are available upon request.

Higher frequency ranges (with K-connectors) are also available upon request.



Optional Indicator Specifications

Max withstand voltage: 60V
Max current capacity: 100mA
Max "ON" resistance: 16Ω

Note: +VDC and -C must be connected to operate.

MC33-, 1P3T SWITCH
MC34-, 1P4T SWITCH
MC35-, 1P5T SWITCH
MC36-, 1P6T SWITCH

1PnT PORT CONFIGURATIONS

1PnT	Ports Used					
1P6T	1	2	3	4	5	6
1P5T	1	2	3	4	5	
1P4T	1	2	4	5		
1P3T	1	3	5			

Note: "Blank" represents the unused RF and corresponding control ports.

H = 52 mm (max)
H = 62 mm (max) for options with TTL and/or self cutoff

NORMALLY OPEN 15-PIN D-SUB PINOUT

Pin No.	PINOUT
n=1-6	Vn (Jn-COM)
7	COM(-)
8	1 (IND: J1-C)
9	2 (IND: J2-C)
10	3 (IND: J3-C)
11	4 (IND: J4-C)
12	5 (IND: J5-C)
13	6 (IND: J6-C)
14	COM_I
15	+VDCI

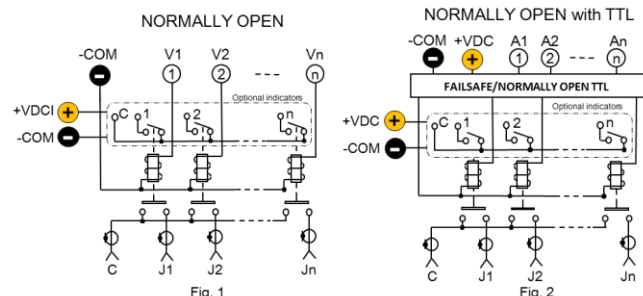
PIN 8-15: For optional INDICATORS only.

NORMALLY OPEN TTL 15-PIN D-SUB PINOUT

Pin No.	PINOUT
n=1-6	An (Jn-COM)
7	COM(-)
8	1 (IND: J1-C)
9	2 (IND: J2-C)
10	3 (IND: J3-C)
11	4 (IND: J4-C)
12	5 (IND: J5-C)
13	6 (IND: J6-C)
14	COM_I
15	+VDC

PIN 8-14: For optional INDICATORS only.

Pin 1-6: The corresponding control signal inputs.



Mechanical drawings (unit: mm, other tolerance +/-0.5mm).

MC3n-SxxNxx-s: n=3-6 (e.g., n=6 for 1P6T), short (low profile version)

Normally Open

The MC3-K40 Series features K connectors and an operation frequency range of DC to 40 GHz. This series is of normally open type. Options include TTL, coil suppression diodes, indicators etc. The product is typically supplied with a 15-pin male D-sub control interface.



Specifications

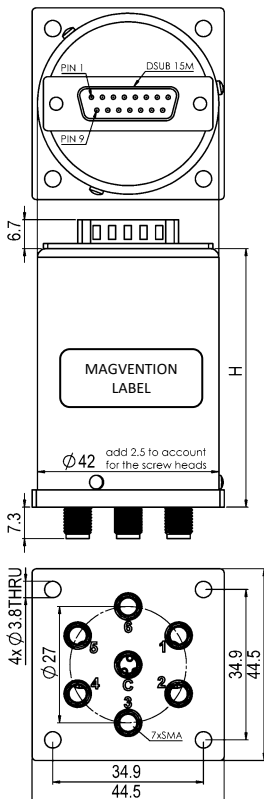
Contact Material	Plated Au
Switching Sequence	Break before Make
Switching Time (max)	15msec
Impedance	50Ω
Temperature Range	-25°C to +65°C (Standard) -55°C to +85°C ("e" option)
Relative Humidity	5 to 85%
Operation Life (cycles)	1,000,000 (Standard)
Vibration (operating)	10G RMS, 20-2000Hz
Mechanical Shock (non-operating)	50G, 1/2 Sine, 11msec
Weight (approx.)	190g

Voltage (VDC)		12	18	24	28
Current (mA)	NORMALLY OPEN	300	210	170	150

Other options are available upon request.

Standard

Frequency Range (GHz)	VSWR (max)	Insertion Loss (dB) (max)	Isolation (dB) (min)
DC-6	1.3	0.3	70
6-12	1.4	0.4	60
12-18	1.5	0.5	60
18-26.5	1.9	0.8	50
26.5-40	2	1	50



Optional Indicator Specifications

Max withstand voltage: 60V
Max current capacity: 100mA
Max "ON" resistance: 16Ω

Note: +VDC and -C must be connected to operate.

- MC33-, 1P3T SWITCH
- MC34-, 1P4T SWITCH
- MC35-, 1P5T SWITCH
- MC36-, 1P6T SWITCH

1PnT PORT CONFIGURATIONS

1PnT	Ports Used					
1P6T	1	2	3	4	5	6
1P5T	1	2	3	4	5	
1P4T	1	2		4	5	
1P3T	1		3		5	

Note: "Blank" represents the unused RF and corresponding control ports.

H = 52 mm (max)
H = 62 mm (max) for options with TTL and/or self cutoff

NORMALLY OPEN 15-PIN D-SUB PINOUT

Pin No.	PINOUT
n=1-6	Vn (Jn-COM)
7	COM(-)
8	1 (IND: J1-C)
9	2 (IND: J2-C)
10	3 (IND: J3-C)
11	4 (IND: J4-C)
12	5 (IND: J5-C)
13	6 (IND: J6-C)
14	COM_I
15	+VDCI

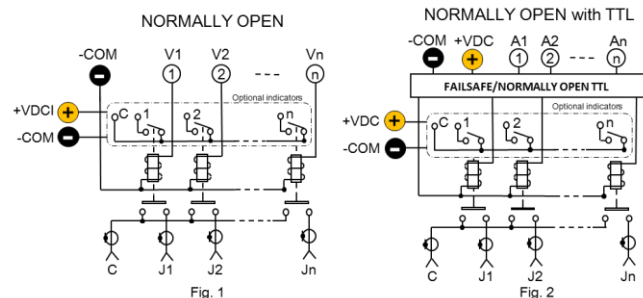
PIN 8-15: For optional INDICATORS only.

NORMALLY OPEN TTL 15-PIN D-SUB PINOUT

Pin No.	PINOUT
n=1-6	An (Jn-COM)
7	COM(-)
8	1 (IND: J1-C)
9	2 (IND: J2-C)
10	3 (IND: J3-C)
11	4 (IND: J4-C)
12	5 (IND: J5-C)
13	6 (IND: J6-C)
14	COM_I
15	+VDC

PIN 8-14: For optional INDICATORS only.

Pin 1-6: The corresponding control signal inputs.



Mechanical drawings (unit: mm, other tolerance +/-0.5mm).

MC3 -s

short, 1P6T, U (2.4mm), DC-50GHz

MC3n-UxxNxx-s: n=3-6 (e.g., n=6 for 1P6T), short (low profile version)

Normally Open

The **MC3-U50** Series features 2.4mm connectors and an operation frequency range of DC to 50 GHz. This series is of normally open type. Options include TTL, coil suppression diodes, indicators etc. The product is typically supplied with a 15-pin male D-sub control interface.



Specifications

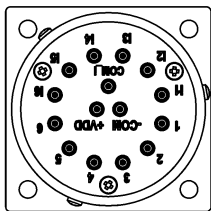
Contact Material	Plated Au
Switching Sequence	Break before Make
Switching Time (max)	15msec
Impedance	50Ω
Temperature Range	-25°C to +65°C (Standard) -55°C to +85°C ("e" option)
Relative Humidity	5 to 85%
Operation Life (cycles)	1,000,000 (Standard)
Vibration (operating)	10G RMS, 20-2000Hz
Mechanical Shock (non-operating)	50G, 1/2 Sine, 11msec
Weight (approx.)	190g

Voltage (VDC)		12	18	24	28
Current (mA)	NORMALLY OPEN	300	210	170	150

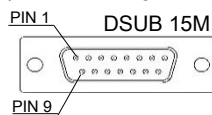
Standard

Frequency Range (GHz)	VSWR (max)	Insertion Loss (dB) (max)	Isolation (dB) (min)
DC-6	1.3	0.2	70
6-12	1.3	0.3	70
12-18	1.4	0.4	60
18-26.5	1.7	0.7	55
26.5-32	1.9	0.8	50
32-50	2.0	1.2	50

Top Solder Pin arrangements.



Top DSUB arrangements.



Optional Indicator Specifications

Max withstand voltage: 60V
Max current capacity: 100mA
Max "ON" resistance: 16Ω

Note: +VDC and -C must be connected to operate.

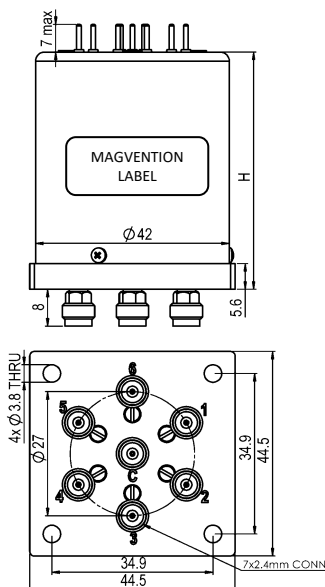
- MC33-, 1P3T SWITCH
- MC34-, 1P4T SWITCH
- MC35-, 1P5T SWITCH
- MC36-, 1P6T SWITCH

1PnT PORT CONFIGURATIONS

1PnT	Ports Used					
1P6T	1	2	3	4	5	6
1P5T	1	2	3	4	5	
1P4T	1	2		4	5	
1P3T	1		3	5		

Note: "Blank" represents the unused RF and corresponding control ports.

For the "-s" option:
H = 52 mm (max)
H = 62 mm (max) for options with TTL and/or self cutoff



Mechanical drawings (unit: mm, other tolerance +/-0.5mm).

NORMALLY OPEN 15-PIN D-SUB PINOUT

Pin No.	PINOUT
n=1-6	Vn (Jn-COM)
7	COM(-)
8	1 (IND: J1-C)
9	2 (IND: J2-C)
10	3 (IND: J3-C)
11	4 (IND: J4-C)
12	5 (IND: J5-C)
13	6 (IND: J6-C)
14	COM_I
15	+VDCI

Pin 8-15: For optional INDICATORS only.

NORMALLY OPEN TTL 15-PIN D-SUB PINOUT

Pin No.	PINOUT
n=1-6	An (Jn-COM)
7	COM(-)
8	1 (IND: J1-C)
9	2 (IND: J2-C)
10	3 (IND: J3-C)
11	4 (IND: J4-C)
12	5 (IND: J5-C)
13	6 (IND: J6-C)
14	COM_I
15	+VDC

Pin 8-14: For optional INDICATORS only.

Pin 1-6: The corresponding control signal inputs.

