

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

**NORMALLY OPEN  
or LATCHING**

The MCFnT-S18 product features SMA connectors and an operation frequency range of DC to 18 GHz. This product can be of normally-open or latching type and comes with internal self-terminations. Options include coils suppression diodes, TTL, and/or self cutoff circuits, and indicators.



Frequency Range (GHz)	VSWR (max)	Insertion Loss (dB) (max)	Isolation (dB) (min)
DC-6	1.3	0.3	80
6-12	1.4	0.4	70
12-18	1.5	0.5	60

Specifications	
Contact Material	Plated Au
Switching Sequence	Break before Make
Switching Time (max)	15msec
Impedance	50Ω
Temperature Range	-25°C to +65°C -55°C to +85°C ("e" option)
Relative Humidity	5 to 85%
Operation Life (cycles)	1000000
Vibration Operating	10G RMS, 20-2000Hz
Mechanical Shock (non-operating)	50G, 1/2 Sine, 11msec
Weight (approx.)	240g

Voltage (VDC)		12	18	24	28
Current (mA)	Normally Open	300	220	167	160
	Latching (set)	350	240	180	160

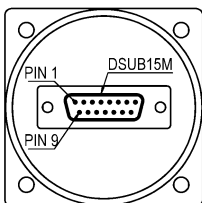
OPTIONAL INDICATOR	
Pin No.	PINOUT
8	1 (IND: J1-C)
9	2 (IND: J2-C)
10	3 (IND: J3-C)
11	4 (IND: J4-C)
12	5 (IND: J5-C)
13	6 (IND: J6-C)
14	COM_I
15	+VDCI

**Optional Indicator Specifications**

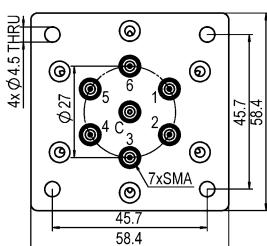
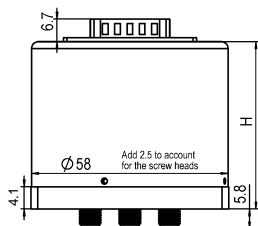
Max withstand voltage: 60V  
Max current capacity: 100mA  
Max "ON" resistance: 16Ω

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

For LATCHING, I(reset) = n x I(set).  
Other options are available upon request.



MCF3-, 1P3T SWITCH  
MCF4-, 1P4T SWITCH  
MCF5-, 1P5T SWITCH  
MCF6-, 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 = 50 (max) (STANDARD)  
= 62 (max) (with TTL)

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(-)
8-15	UNUSED

NORMALLY OPEN TTL 15-PIN D-SUB PINOUT	
Pin No.	PINOUT
n=1-6	An ( Jn-COM )
7	COM(-)
8-14	UNUSED
15	+VDC

LATCHING (PULSE) 15-PIN D-SUB PINOUT	
Pin No.	PINOUT
n=1-6	+ΔVn ( Jn-COM )
7	COM(-)
8	+ΔVR (Reset ALL OPEN)
9-15	UNUSED

LATCHING TTL 15-PIN D-SUB PINOUT	
Pin No.	PINOUT
n=1-6	An ( Jn-COM )
7	COM(-)
8	AR (Reset ALL OPEN)
9-14	UNUSED
15	+VDC

LATCHING SELF CUTOFF 15-PIN D-SUB PINOUT	
Pin No.	PINOUT
n=1-6	Vn ( Jn-COM )
7	COM(-)
8-15	UNUSED

LATCHING TTL&SELF CUTOFF 15-PIN D-SUB PINOUT	
Pin No.	PINOUT
n=1-6	An ( Jn-COM )
7	COM(-)
8-14	UNUSED
15	+VDC

Pin 1-6: The corresponding control signal inputs.

Note: For the SELF CUTOFF, a "RESET ALL" option is available upon request.

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

**NORMALLY OPEN  
or LATCHING**

The **MCFnT-K40** product features K (2.92mm) connectors and an operation frequency range of DC to 40 GHz. This product can be of normally-open or latching type and comes with internal self-terminations. Options include coils suppression diodes, TTL, and/or self cutoff circuits, and indicators.



Specifications	
Contact Material	Plated Au
Switching Sequence	Break before Make
Switching Time (max)	15msec
Impedance	50Ω
Temperature Range	-25°C to +65°C
	-55°C to +85°C ("e" option)
Relative Humidity	5 to 85%
Operation Life (cycles)	1000000
Vibration Operating	10G RMS, 20-2000Hz
Mechanical Shock (non-operating)	50G, 1/2 Sine, 11msec
Weight (approx.)	240g

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
18-32	1.9	0.8	55
32-40	2.1	1.3	50

Voltage (VDC)		12	18	24	28
Current (mA)	Normally Open	300	220	167	160
	Latching (set)	350	240	180	160

NORMALLY OPEN 15-PIN D-SUB PINOUT	
Pin No.	PINOUT
n=1-6	Vn ( Jn-COM )
7	COM(-)
8-15	UNUSED

NORMALLY OPEN TTL 15-PIN D-SUB PINOUT	
Pin No.	PINOUT
n=1-6	An ( Jn-COM )
7	COM(-)
8-14	UNUSED
15	+VDC

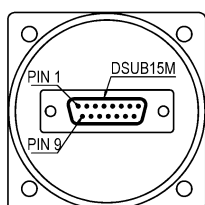
LATCHING (PULSE) 15-PIN D-SUB PINOUT	
Pin No.	PINOUT
n=1-6	+ΔVn ( Jn-COM )
7	COM(-)
8	+ΔVR (Reset ALL OPEN)
9-15	UNUSED

LATCHING TTL 15-PIN D-SUB PINOUT	
Pin No.	PINOUT
n=1-6	An ( Jn-COM )
7	COM(-)
8	AR (Reset ALL OPEN)
9-14	UNUSED
15	+VDC

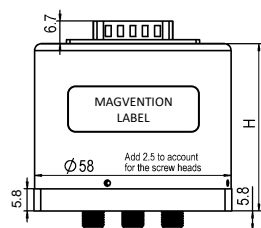
LATCHING SELF CUTOFF 15-PIN D-SUB PINOUT	
Pin No.	PINOUT
n=1-6	Vn ( Jn-COM )
7	COM(-)
8-15	UNUSED

LATCHING TTL&SELF CUTOFF 15-PIN D-SUB PINOUT	
Pin No.	PINOUT
n=1-6	An ( Jn-COM )
7	COM(-)
8-14	UNUSED
15	+VDC

For LATCHING, I(reset) = n x I(set).  
Other options are available upon request.



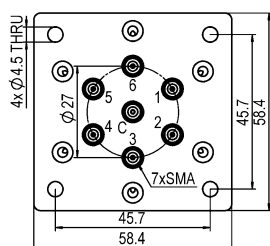
MCF3-,1P3T SWITCH  
MCF4-,1P4T SWITCH  
MCF5-,1P5T SWITCH  
MCF6-,1P6T SWITCH



### 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 = 50 (max) (STANDARD)  
= 62 (max) (with TTL)

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

Pin 1-6: The corresponding control signal inputs.

Note: For the SELF CUTOFF, a "RESET ALL" option is available upon request.

### OPTIONAL INDICATOR

Pin No.	PINOUT
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

### Optional Indicator Specifications

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

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