

## SWITCH MULTIPLEXER FILTER

### GENERAL DESCRIPTION

Switch Multiplexer is 8 channel filter bank covering 2-18 GHz. Each channel can be independently controlled which provides 256 possible combinations. Filter network includes low noise amplifiers for satisfying zero loss and low noise figure.

System has equally spaced channels in standard configuration. Custom spacing for the channels is also available for specific applications. Efficient structure and single supply operation capability eliminates the need for complex power management.



Switch Multiplexer Filter

### KEY SPECIFICATIONS

2-18 GHz Full BW  
 Low Noise Figure  
 Independently Controlled 8 Channels  
 All Pass, Even Mode, Odd Mode Selection  
 Fast Switching  
 Single Supply

### TECHNICAL SPECIFICATIONS

<b>Full Bandwidth</b>	2 – 18 GHz	
<b>Frequency Channels*</b>	1	2 -4 GHz
	2	4 -6 GHz
	3	6 -8 GHz
	4	8 -10 GHz
	5	10 -12 GHz
	6	12 -14 GHz
	7	14 -16 GHz
	8	16 -18 GHz
<b>Filter Control</b>	8 Bit TTL	
<b>Insertion Loss</b>	0 dB (typical)	
<b>Noise Figure</b>	< 6 dB	
<b>Input/Output Impedance</b>	50 Ohm	
<b>VSWR (Input/Output)</b>	< 2 : 1	
<b>Operating Temperature</b>	-40 °C to +80 °C	
<b>Input P1dB</b>	0 dBm	
<b>Rejection</b>	> 35 dB	
<b>Switching Speed</b>	< 100 ns	
<b>Power Requirement</b>	< 500 mA @ 12 V	
<b>Dimensions (cm)</b>	15 x 13 x 1.2	
<b>Weight</b>	500 g	

\* Contact TUALCOM for specific spacing requirements