

<b>Lorch Microwave</b>	Part Number: 7IFAX-38/83.5-SR	Date: May 10, 2011	

### Product Feature

**The 7IFAX -38/83.5-SR is a seven channel low frequency switch bank. The unit features rack mounting with an LED front control panel to show the active channel. The unit is designed with 220V AC power supply for industrial use. The switching speed is 500 ns maximum and features standard 3 bit TTL control. This unit has an isolation spec. of 60 dB with a maximum insertion loss of 3.5 dB across the center portion of each band. The Group Delay is 100ns maximum across the center portion of each band and the maximum input power is +30 dBm. For further information and performance data please contact Lorch Microwave.**

### Overview

<b>Product Type:</b> Switched Filter Bank		
<b>Number of Channels:</b> 7	<b>Frequency Range:</b> 36 to 85.5 MHz	<b>Size:</b> 19.0 X 13.0 X 1.72
<b>Insertion Loss:</b> 3.5 dB	<b>Return Loss:</b> 15.0 dB	<b>Power Supplies</b>
<b>Screening:</b>		220V AC
<b>Seal:</b> 100 % Humidity		
<b>Temp:</b> 0 to +70 deg. C		
<b>Notes:</b>		

### Channel Frequency Allocation:

CH	Lower Band-Edge	Upper Band-Edge	Center Freq.	BW	% BW	Low Rejection	Low Rejection dB	Low Shape Factor	High Rejection	High Rejection dB	High Shape Factor	# Sections
1	36	45	40.5	9.0	22%	28	60	2.77	53	60	2.77	8
2	41	50.5	45.75	9.5	21%	33	60	2.68	58.5	60	2.68	8
3	46.5	56.5	51.5	10	19%	38.5	60	2.6	64.5	60	2.6	8
4	52.5	63	57.75	10.5	18%	44.5	60	2.5	71	60	2.5	8
5	59	70	64.5	11	17%	51	60	2.45	78	60	2.45	8
6	66	77.5	71.75	11.5	16%	58	60	2.4	85.5	60	2.4	8
7	73.5	85.5	79.5	12	15%	65.5	60	2.33	93.5	60	2.33	8

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**Specification Summary:**

1. **Insertion Loss at CF:** 3.5 dB
2. **VSWR:** 1.4:1
3. **Passband Flatness:** 3.0 dB over Passband
4. **Rejection:** 60dB Minimum
5. **Switching Speed:** 500 ns Maximum
6. **Size:** 19.0 x 13.0 x 1.72
  - a. This unit is Rack Mounted
7. **Maximum Operating Input Power:** +30 dBm
8. **Maximum Non-Operating Input Power:** +30 dBm
9. **Operating Temperature:** 0 to +70°C
10. **Filter Shape Factor:** As specified
11. **Group Delay:** 0 ns minimum 100 ns Max. across 50% of the 3 dB BW
12. **Ripple:** .5 dB across 50% of the 3 dB BW
13. **Video Transients:** No video transient@  $t > 700$  ns

