

6-Channel 1.0-8.0 GHz Switched Filter Bank

Electrical Specifications

Parameter	Min.	Typ.	Max.	Units	Notes
Frequency Range	1.0	-	8.0	GHz	
Insertion Loss		5.0	5.5	dB	At Minimum Insertion Loss Point
Input / Output VSWR (Across Passband)	-	1.7:1	2.0:1	NA	
Passband Flatness	-	1.5	3.0	dB	Typical
Switching Speed		60	200	ns	50% TTL to 10% / 90% RF
Supply Voltage <i>+5.0 Volt Supply</i>	+4.75	+5.0	+5.25	V	
Supply Current <i>+5.0 Volt Supply</i>	-	60	150	mA	

Passband Specifications

Channel	Lower Band-Edge (GHz)	Upper Band-Edge (GHz)	Center Frequency (GHz)	Bandwidth (GHz)	% BW
1	1.0	2.3	1.65	1.3	78.8%
2	2.2	3.5	2.85	1.3	45.6%
3	3.4	4.7	4.05	1.3	32.1%
4	4.6	5.9	5.25	1.3	24.8%
5	5.8	7.1	6.45	1.3	20.2%
6	7.0	8.0	7.5	1.0	13.3%

TTL Control Code					
b5	b4	b3	b2	b1	b0
0	0	0	0	0	1
0	0	0	0	1	0
0	0	0	1	0	0
0	0	1	0	0	0
0	1	0	0	0	0
1	0	0	0	0	0

Rejection Specifications

Channel	-50 dBc Low-Side (GHz)	-20 dBc Low-Side (GHz)	-30 dBc High-Side (GHz)	-50 dBc High-Side (GHz)
1	0.1 - 0.7	0.8	2.8	3.5 - 7.5
2	0.1 - 1.4	2.0	4.0	4.8 - 10.0
3	0.1 - 3.0	3.2	5.2	5.9 - 10.0
4	0.1 - 3.5	4.4	6.4	7.5 - 10.0
5	0.1 - 4.7	5.6	7.6	8.5 - 10.0
6	0.1 - 6.2	6.8	8.5	9.15 - 10.0

Mechanical Specifications

Parameter	L	W	H		Notes
Size	3.8	3.4	0.53	inches	See Outline Drawing Below
RF/DC Connections	RF: SMA / DC: 9-Pin Micro-D connector				

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Absolute Maximum Ratings

Supply Voltage +5.0 Volt Supply -5.0 Volt Supply	+6.0 VDC -6.0 VDC
RF Input Power	+29 dBm
Storage Temperature	-45 to +100 °C
Operating Temperature	-40 to +85 °C
ESD Sensitivity	Class 1B



ELECTROSTATIC SENSITIVE DEVICE. OBSERVE PROPER HANDLING PRECAUTIONS

Outline Drawing

REVISIONS				
ECN#	REV.	DESCRIPTION	DATE	APPROVED
0000-271	A	CHANGE PIN CALLOUT.	9/29/04	WMC
0000-469	B	UPDATE PIN CALLOUTS.	12/30/04	WMC

AIRBORN MICRO-D RECEPTACLE

PIN CALLOUT	
1	BIT 2
2	BIT 1
3	BIT 0
4	GND
5	+5V DC
6	OPEN
7	BIT 5
8	BIT 4
9	BIT 3

CUSTOMER APPROVAL: QUOTE/P.O.# _____ NAME: _____ DATE: _____ SIGNATURE: _____	PROPRIETARY AND CONFIDENTIAL THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF SPECTRUM SBI MICROWAVE, INC. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF SPECTRUM SBI MICROWAVE, INC. IS PROHIBITED.	DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL: ± ANGULAR: MACH ± BEND ± TWO PLACE DECIMAL ± 0.02 THREE PLACE DECIMAL ± 0.01	APPROVAL: _____ NAME _____ DATE 7/12/04 DRAWN WMC CHECKED LTD 7/12/04 CSUR APPR. WEG 7/12/04 ENG APPR. _____ C.A. _____ COMMENTS: _____ DO NOT SCALE DRAWING SCALE: 1:2 SHEET 1 OF 1
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MATERIAL ALUMINUM		38166 OLD STAGE RD. DELMAR DE 19940 FSCM# 67021 OUTLINE FOR 3.80 X 3.40 X .53 FILTER BANK HOUSING A010-2236
USED ON	FINISH SILVER PLATE	
APPLICATION	DO NOT SCALE DRAWING	