

1.75-20.2 GHz Switched Filter Bank

Typical Applications

- Preselector
- Transmitter/Receiver Systems
- Avionics
- Military Applications
- EW Radar Systems

Key Features

- 10 Channels
- Fast Switching Speed < 500 nS Typical
- Multi-Octave Frequency Range
- Can be Screened to Meet MIL-STD-202, 810
- 60 dBc Rejection Levels

Electrical Specifications

Parameter	Min.	Typ.	Max.	Units	Notes
Frequency Range	1.75	-	20.2	GHz	
Insertion Loss	-	6.5	8.0	dB	At Center Frequency
Input / Output VSWR	-	1.8:1	2.2:1	-	Over passband
Passband Flatness	-	1.25	1.5	dB	
Switching Speed	-	400	500	ns	50% TTL to 90%/10% RF
Supply Voltage				Vdc	
+5.0 Volt Supply	4.5	5.0	5.5		
-5.0 Volt Supply	-4.5	-5.0	-5.5		
Supply Current				mA	
+5.0 Volt Supply		500	650		
-5.0 Volt Supply		80	100		

Passband Specifications

Channel	Lower Band-Edge (GHz)	Upper Band-Edge (GHz)	Center Frequency (GHz)	Bandwidth (GHz)
1	1.75	4.0	2.875	2.25
2	3.75	5.02	4.385	1.27
3	4.96	6.46	5.71	1.5
4	6.4	7.75	7.075	1.35
5	7.35	11.35	9.35	4.0
6	11.09	12.04	11.565	0.95
7	11.9	13.2	12.55	1.3
8	13.1	15.4	14.25	2.3
9	15.3	16.3	15.8	1.0
10	16.2	20.2	18.2	4.0

Rejection Specifications

Channel	Low-Side 60 dBc Rejection	High-Side 60 dBc Rejection
1	.01 – 1.200 (GHz)	5.4–18.0 (GHz)
2	0.1 – 3250 (GHz)	5.925–18.0 (GHz)
3	Thru Path (no filter)	
4	0.1 – 5.725 (GHz)	8.6–18.0 (GHz)
5	0.1 – 6.0 (GHz)	13.5–18.0 (GHz)
6	0.1–10.6 (GHz)	12.6–18.0 (GHz)
7	0.1–11.25 (GHz)	14.0–18.0 (GHz)
8	0.1–12.0 (GHz)	16.75–18.0 (GHz)
9	0.1–14.75 (GHz)	17.0–18.0 (GHz)
10	0.1–14.4 (GHz)	22.6 (GHz)

TTL Selection Code

Channel	E3 (MSB)	E2	E1	E0 (LSB)
1	0	0	0	1
2	0	0	1	0
3	0	0	1	1
4	0	1	0	0
5	0	1	0	1
6	0	1	1	0
7	0	1	1	1
8	1	0	0	0
9	1	0	0	1
10	1	0	1	0

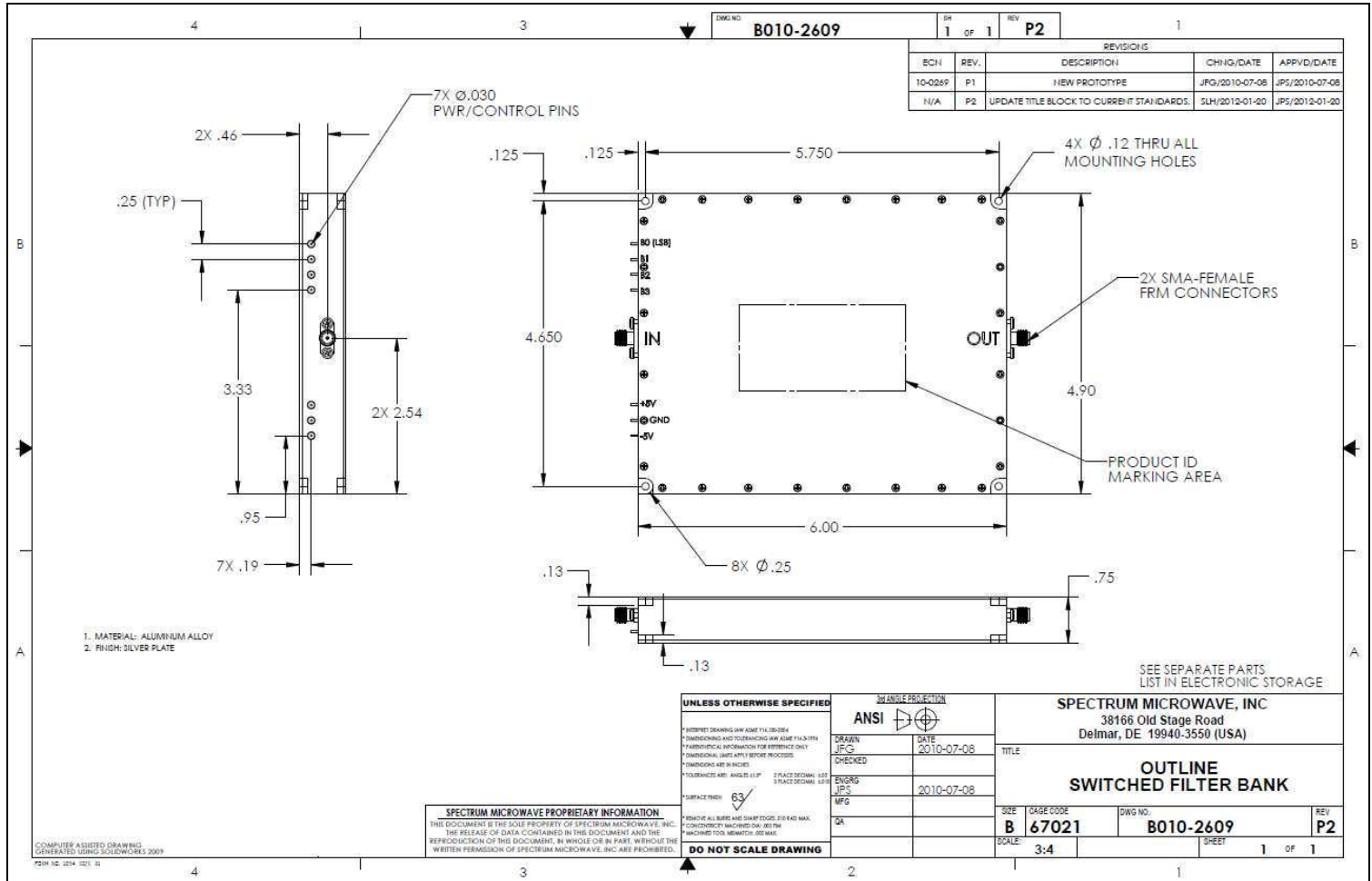
Absolute Maximum Ratings

Supply Voltage	+5.0 Vdc -5.0 Vdc	+6.0 Vdc -6.0 Vdc
RF Input Power		+28 dBm
Storage Temperature		-55 to +85 °C
Operating Temperature		-45 to +85 °C
ESD Sensitivity		Class 1B



ELECTROSTATIC SENSITIVE
DEVICE. OBSERVE PROPER
HANDLING PRECAUTIONS

Outline Drawing



Specifications are subject to change without notice