

DESCRIPTION

PMI MODEL: 6SFB-2-53-LP-AMP-SFF IS A SIX CHANNEL SWITCH FILTER BANK (SFB) FOLLOW BY AN AMPLIFIER THAT OPERATES OVER THE 2.0 GHz TO 53.0 GHz FREQUENCY RANGE. THIS MODEL OFFERS FAST SWITCHING SPEEDS OF 200 ns WHILE MAINTAINING A GAIN OF 20 dB AND 0dBm P1dB.

SPECIFICATIONS

- FREQUENCY RANGE: ----- 2.0 GHz TO 53.0 GHz
- GAIN: ----- 20 dB MINIMUM
- VSWR: ----- 2.0:1 MAXIMUM
- OUTPUT 2ND HARMONIC:----- 45dBc @ -5dBm Output Power (Filter passband must be selected for maximum harmonic attenuation. Thru path 2nd harmonic value TBD)
- SWITCHING SPEED: ----- 200 ns TYPICAL
(FROM 50% TTL TO 90%/10% RF)
- POWER HANDLING: ----- +10 dBm MAXIMUM
- OUTPUT P1dB: ----- 0 dBm GOAL, -5 dBm MINIMUM
- LOGIC INPUT: ----- TTL COMPATIBLE, 3 BITS DECODED
TTL HIGH = 2 V MINIMUM
TTL LOW = 0.8 V MAXIMUM
- POWER SUPPLY: ----- +15 VDC @ 1000 mA MAXIMUM
-15 VDC @ 100 mA MAXIMUM
- CONNECTORS: ----- RF: (J1, J2) 2.4mm FEMALE (REMOVABLE) IAW MIL-STD-202
J3 - CONTROL & POWER: D-SUB, DB9 CONNECTOR
- SIZE: ----- 5.50" x 3.00" x 0.75" MAXIMUM
139.70 mm x 76.20 mm x 19.05 mm MAXIMUM
- FINISH: ----- PAINTED BLUE, MOUNTING SURFACE FREE OF PAINT

FILTER CHARACTERISTICS						
PARAMETER	FILTER 1	FILTER 2	FILTER 3	FILTER 4	FILTER 5	THRU
PASSBAND, MINIMUM	2.0 - 3.5 GHz	3.5 - 6.0 GHz	6.0 - 10.0 GHz	10.0 - 18.0 GHz	18.0 - 27.0 GHz	2.0 - 53.0 GHz
GAIN, MINIMUM	20dB	20dB	20dB	20dB	20dB	20dB
REJECTION OF 50dBc MIN	4.0 - 7.0 GHz	7.0 - 12.0 GHz	12.0 - 20.0 GHz	20.0 - 40.0 GHz	36.0 - 53.0 GHz	N/A

ENVIRONMENTAL RATINGS

- TEMPERATURE: ----- +10 °C TO +55 °C (OPERATING)
-10 °C TO +60 °C (STORAGE)
- HUMIDITY: ----- MIL-STD-202, METHOD 103B COND. B
- SHOCK: ----- MIL-STD-202, METHOD 213B COND. B
- VIBRATION: ----- MIL-STD-202, METHOD 204D COND. B
- ALTITUDE: ----- MIL-STD-202, METHOD 105C COND. B
- TEMPERATURE CYCLE: ----- MIL-STD-202, METHOD 107D COND. A

NOTE 1: THE SFB IS DESIGNED TO MEET ALL STATED ENVIRONMENTAL SPECIFICATIONS.

NOTE 2: THE ABOVE SPECIFICATIONS ARE SUBJECT TO CHANGE OR REVISION

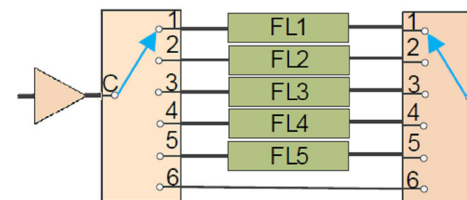
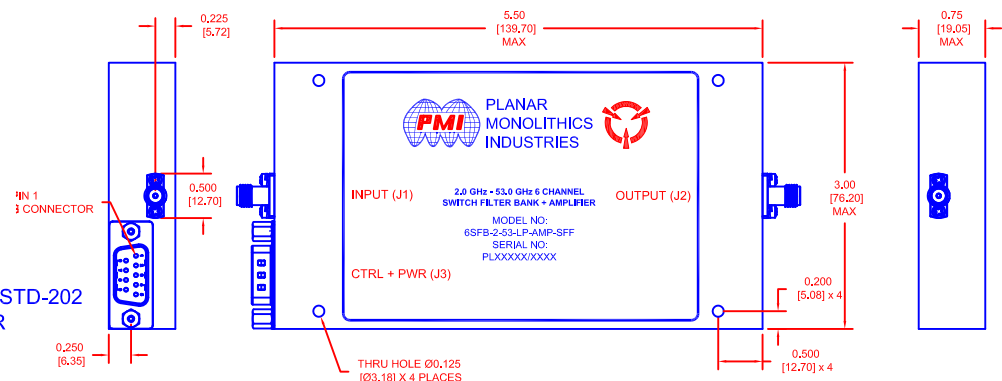
PMI CONFIDENTIAL AND PROPRIETARY

LOGIC TABLE			
PIN	L3	L2	L1
FILTER 1	0	0	1
FILTER 2	0	1	0
FILTER 3	0	1	1
FILTER 4	1	0	0
FILTER 5	1	0	1
THRU	1	1	0

ALL DIMENSIONS
ARE IN INCHES [mm]
TOLERANCES:
X.XX ±0.020
X.XXX ±0.010

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	-	PRELIMINARY	8/7/19	

MECHANICAL OUTLINE



J3 CONNECTOR	
PIN	FUNCTION
1	L1
2	L2
3	L3
4	N/C
5	N/C
6	+15 VDC
7	GND
8	GND
9	-15 VDC

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ISO 9001 CERTIFIED



APPROVALS		DATE		TITLE		PRODUCT FEATURE	
DRAWN		8/7/19		A		6SFB-2-53-LP-AMP-SFF	
REDRAWN				A		2 GHz to 53 GHz 6 Channel Switch Filter Bank + Amplifier	
ISSUED				A		PRELIMINARY	
SCALE		N:S		SHEET		1 OF 1	