

DESCRIPTION

PMI MODEL: 6SFB-1G20G-LP-AMP-SFF IS A SIX CHANNEL SWITCH FILTER BANK (SFB) FOLLOW BY AN AMPLIFIER THAT OPERATES OVER THE 1.0 GHz TO 20.0 GHz FREQUENCY RANGE. THIS MODEL OFFERS FAST SWITCHING SPEEDS OF 200 ns WHILE MAINTAINING A GAIN OF 20 dB AND 22dBm P1dB.

SPECIFICATIONS

- FREQUENCY RANGE: ----- 1.0 GHz TO 20.0 GHz
- GAIN: ----- 20 dB MINIMUM, 25 dB TYPICAL
- VSWR: ----- 2.0:1 MAXIMUM
- OUTPUT 2ND HARMONIC: ----- 45dBc @ 0dBm 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: ----- +15 dBm MAXIMUM
- OUTPUT P1dB: ----- +10 dBm MINIMUM
- LOGIC INPUT: ----- TTL COMPATIBLE, 3 BITS DECODED
TTL HIGH = 2 V MINIMUM
TTL LOW = 0.8 V MAXIMUM
- POWER SUPPLY: ----- +15 VDC @ 800 mA MAXIMUM
-15 VDC @ 100 mA MAXIMUM
- CONNECTORS: ----- RF: (J1, J2) SMA 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	1GHz - 1.25 GHz	1.25 - 2.0 GHz	2 - 3.5 GHz	3.5 - 6.0 GHz	6.0 - 10.0 GHz	1 - 20.0 GHz
GAIN, MINIMUM	20dB	20dB	20dB	20dB	20dB	20dB
REJECTION OF 50dBc MIN	2.0 - 2.5 GHz	2.5 - 4.0 GHz	4.0 - 7.0 GHz	7.0 - 12.0 GHz	12.0 - 20 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

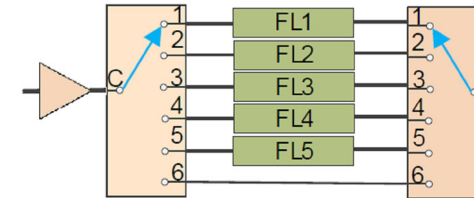
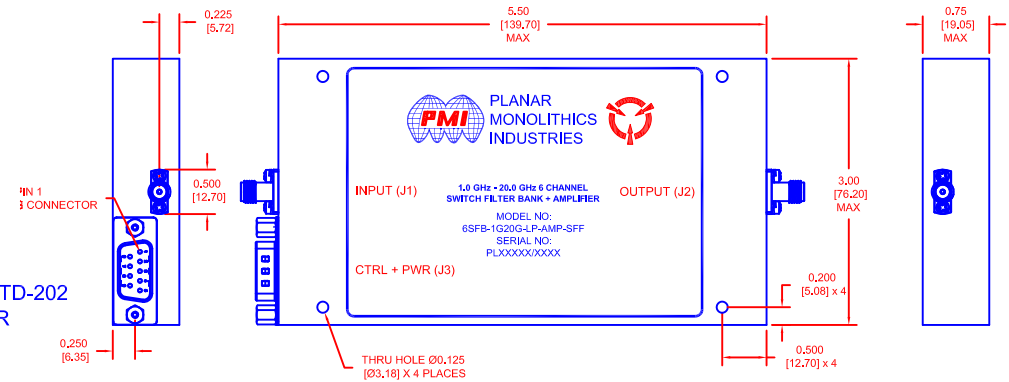
PMI CONFIDENTIAL AND PROPRIETARY

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	5/24/19	
	1	SPEC UPDATE	6/14/19	
	2	SPEC UPDATE	6/19/19	
	3	SPEC UPDATE	6/25/19	
	4	SPEC UPDATE	6/28/19	
	5	CTL & POWER PINS TO CONNECTOR	7/18/19	

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

PLANAR MONOLITHICS INDUSTRIES, INC.
7311-F GROVE ROAD
FREDERICK, MARYLAND 21704 USA
TEL: (301)-662-5019, FAX: (301)-662-1731
WEB: www.pmi-rf.com, EMAIL: sales@pmi-rf.com
ISO 9001 CERTIFIED



APPROVALS		DATE	TITLE		
DRAWN <i>JPH</i>		5/24/19	PRODUCT FEATURE 6SFB-1G20G-LP-AMP-SFF 1 GHz to 20 GHz 6 Channel Switch Filter Bank + Amplifier		
REDRAWN			SIZE A	FSCM NO. 05XQ0	DWG NO. PRELIMINARY
ISSUED			SCALE N:S	SHEET 1 OF 1	REV. 5