

DESCRIPTION

PMI MODEL: 8SFB-7R8G-18R1G-SFF IS AN EIGHT CHANNEL SWITCHED FILTER BANK OFFERING ULTRA FAST SWITCHING SPEED AND HIGH REJECTION WITH LOW LOSS.

SPECIFICATIONS

- FREQUENCY RANGE: ----- 7.875 TO 18.125 GHz
- IMPEDANCE: ----- 50 Ω
- INSERTION LOSS: ----- 10.0 dB MAXIMUM @ CENTER FREQUENCIES, 7 dB GOAL
PASSBAND RIPPLE: 0.5 dB MAX
- INPUT / OUTPUT VSWR: ----- 2.0:1 MAXIMUM, OVER 90% OF THE BAND
- DC SUPPLIES: ----- +5 VDC @ 500 mA
-12 VDC @ 100 mA
- SWITCHING SPEED: ----- 500 ns MAXIMUM
- CONTROL: ----- TTL - 8 Lines
- CONNECTORS: ----- RF: SMA FEMALE
DC & CONTROL: 15 PIN MICRO-D (MALE)
- WEIGHT: ----- 300 $\pm$ 50 g [10.6 $\pm$ 1.7 oz] GOAL
- SIZE: ----- 100 mm MAXIMUM x 90 mm MAXIMUM x 15 mm MAXIMUM
3.94" MAXIMUM x 3.54" MAXIMUM x 0.59" MAXIMUM
- FINISH: ----- PAINTED BLUE
- POWER: ----- 20 dBm CW MAX

ENVIRONMENTAL RATINGS

- TEMPERATURE: ----- -30 °C TO +70 °C (OPERATING)
- ALTITUDE: ----- SEA LEVEL TO 25, FEET

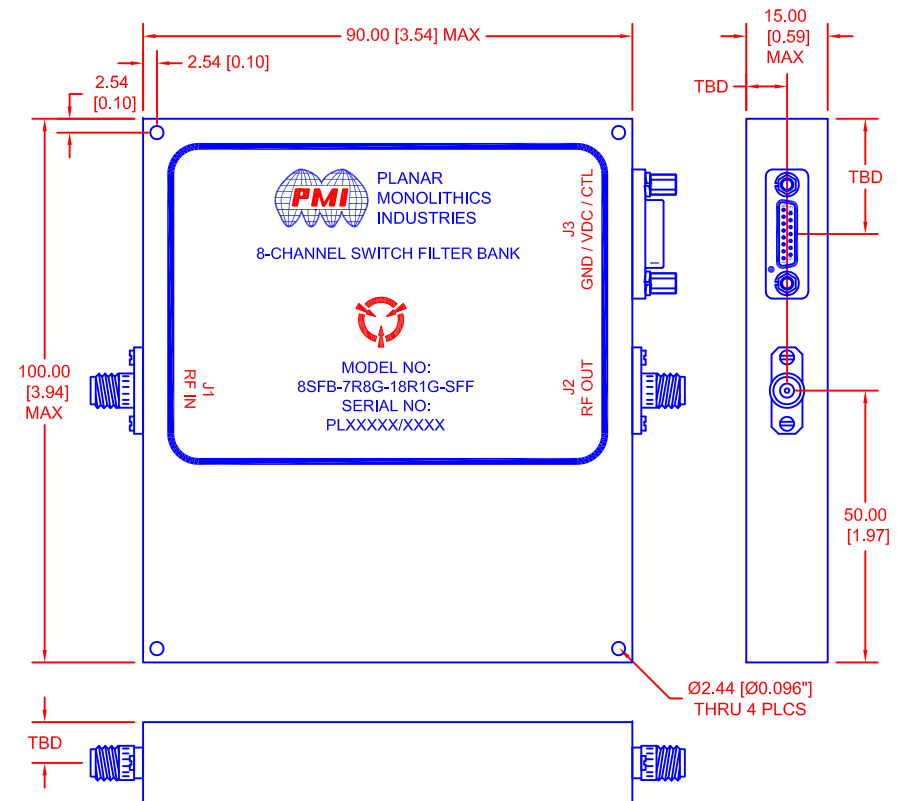
NOTE: SPECIFICATIONS WILL VARY OVER OPERATING TEMPERATURE
NOTE: THE ABOVE SPECIFICATIONS ARE SUBJECT TO CHANGE OR REVISION

PMI CONFIDENTIAL AND PROPRIETARY

ALL DIMENSIONS
ARE IN mm [INCH]
TOLERANCES:
X.XX $\pm$ 0.508 [0.020]
X.XXX $\pm$ 0.254 [0.010]

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	-	PRELIMINARY	05/31/17	

MECHANICAL OUTLINE



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		JPU		05/31/17	
CHECKED					
ISSUED					
SIZE	A	FSCM NO.	05XQ0	DWG NO.	PRELIMINARY
SCALE	N:S			SHEET	1 OF 2

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FILTER CHARACTERISTICS

	CENTER FREQUENCY	LOW FREQUENCY AT 3 dBc ATTENUATION	HIGH FREQUENCY AT 3 dBc ATTENUATION	IN-BAND RIPPLE	LOW FREQUENCY AT 55 dBc ATTENUATION	HIGH FREQUENCY AT 55 dBc ATTENUATION
BPF1	10.0175 GHz	7.875 GHz	10.25 GHz	± 1.5 dB		11 - 17 GHz
BPF2	10.25 GHz	9.125 GHz	11.375 GHz	± 1.5 dB		12.125 - 17.375 GHz
BPF 3	11.25 GHz	10.25 GHz	12.5 GHz	± 1.5 dB		13.25 - 18.5 GHz
BPF 4	12.5 GHz	11.375 GHz	13.625 GHz	± 1.5 dB		14.375 - 19.625 GHz
BPF 5	13.625 GHz	12.5 GHz	14.75 GHz	± 1.5 dB	6.5-11.75 GHz	
BPF 6	14.75 GHz	13.625 GHz	15.875 GHz	± 1.5 dB	7.625 - 12.875 GHz	
BPF 7	15.875 GHz	14.75 GHz	17.0 GHz	± 1.5 dB	8.75 - 14.0 GHz	
BPF8	17 GHz	15.875 GHz	18.125 GHz	± 1.5 dB	9.875 - 15.125 GHz	

J3 CONNECTOR DETAIL

PIN	FUNCTION
1	CTL 1
2	CTL 2
3	CTL 3
4	CTL 4
5	CTL 5
6	CTL 6
7	CTL 7
8	CTL 8
9	GND
10	+5 VDC
11	GND
12	NC
13	GND
14	-12 VDC
15	GND

LOGIC TABLE

	FILTER 1	FILTER 2	FILTER 3	FILTER 4	FILTER 5	FILTER 6	FILTER 7	FILTER 8
TTL CONTROL 1	1	0	0	0	0	0	0	0
TTL CONTROL 2	0	1	0	0	0	0	0	0
TTL CONTROL 3	0	0	1	0	0	0	0	0
TTL CONTROL 4	0	0	0	1	0	0	0	0
TTL CONTROL 5	0	0	0	0	1	0	0	0
TTL CONTROL 6	0	0	0	0	0	1	0	0
TTL CONTROL 7	0	0	0	0	0	0	1	0
TTL CONTROL 8	0	0	0	0	0	0	0	1

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DRAWN <i>JPU</i>	05/31/17						
CHECKED							
ISSUED		SIZE A	FSCM NO. 05XQ0	DWG NO. PRELIMINARY	REV. 1		
		SCALE N:S			SHEET 2 OF 2		