

## DESCRIPTION

PMI MODEL NO: 6SFB-30M600M-CD-SFF IS A 6-CHANNEL SWITCHED FILTER BANK THAT OPERATES OVER THE FREQUENCY RANGE OF 30 TO 600 MHz. IT HAS A MAXIMUM INSERTION LOSS OF 4.5 dB AND A MINIMUM ISOLATION OF 40 dB. THIS MODEL IS OUTFITTED WITH SMA FEMALE CONNECTORS.

## SPECIFICATIONS

- FREQUENCY: 30 TO 600 MHz
- INSERTION LOSS: 4.0 dB TYP, 4.5 dB MAX
- VSWR: 1.5:1 MAX
- ISOLATION: 40 dB MIN
- INPUT POWER: 1 WATT MAX
- VIDEO LEAKAGE: TBD @ RF OUTPUT > 20MHz and 50us CTL Rep Rate (20kHz).
- SWITCHING SPEED: 500 ns TYP
- CONTROL: TTL, "0" = ON, "1" = OFF
- POWER SUPPLY: +15 V @ 300 mA TYP  
-15 V @ 50 mA TYP
- IMPEDANCE: 50 OHMS
- CONNECTORS: SMA FEMALE
- FINISH: PAINTED BLUE

ABSOLUTE MAXIMUM RATINGS	
BIASING	±15 V
TTL CONTROL VOLTAGE	+5 V / 0 V
INPUT RF POWER	+30 dBm
STORAGE TEMPERATURE	-55°C TO +125°C

PIN	FUNCTION
1	CTRL 1
2	CTRL 2
3	CTRL 3
4	N/C
5	N/C
6	N/C
7	+15 VDC
8	GND
9	-15 VDC

LOGIC TABLE								
C3	C2	C1	CHANNEL	PASSBAND (MHz)	LOWER REJECTION (MHz)	REJECTION LEVEL (dBc)	UPPER REJECTION (MHz)	REJECTION LEVEL (dBc)
0	0	0	1	30-45	15 20	60 40	60-70 70-800	40 60
0	0	1	2	45-70	20 25	60 40	90-110 110-800	40 60
0	1	0	3	70-100	20-35 40	60 40	140-160 160-800	40 60
0	1	1	4	100-160	20-55 55-65	60 40	200-220 220-1000	40 60
1	0	0	5	160-275	20-100 100-115	60 40	320-340 340-1500	40 60
1	0	1	6	275-500	20-180 180-190	60 40	550-570 570-1500	40 60
1	1	1	ALL OFF					

## ENVIRONMENTAL RATINGS

- TEMPERATURE: -45 °C TO +85 °C (OPERATING)  
-55 °C TO +125 °C (STORAGE)
- HUMIDITY: 5 TO 85%
- SHOCK: 50G, ½ SINE, 11 ms
- VIBRATION: 10G RMS, 20 - 2000H
- ALTITUDE: MIL-STD-202, METHOD 105C COND. B
- TEMPERATURE CYCLE: MIL-STD-202, METHOD 107D COND. A

NOTE: SPECIFICATIONS WILL VARY OVER OPERATING TEMPERATURE

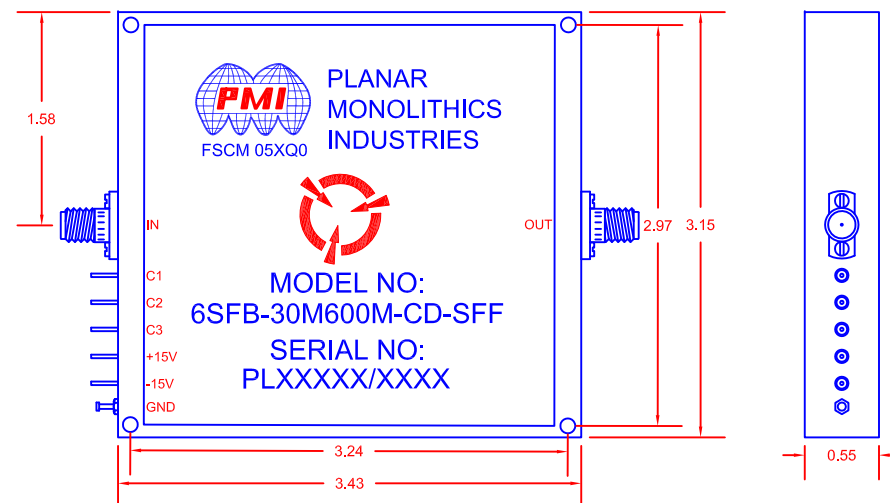
NOTE: THE ABOVE SPECIFICATIONS ARE SUBJECT TO CHANGE OR REVISION

**PMI CONFIDENTIAL AND PROPRIETARY**

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

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	-	PRELIMINARY	1/24/19	
	1	UPDATED SPECS AND MECHANICALS	2/5/19	
	2	UPDATED SPECS	2/8/19	

## MECHANICAL OUTLINE



### NO DAMAGE CONDITIONS

- Any combination of supply voltage at turn-on or loss of power.
- Reverse polarity of any voltage, within industry standard reason.
- Any source and/or load VSWR including short or open with no time limitation.
- 30 dBm CW power input at the input and/or output connector with no time limitation (DC power must be applied for this to apply).
- 30 dBm pulse (1uSec, 0.1% duty cycle) at the input and/or output connector with no time limitation (DC power must be applied for this to apply).
- Static charge (hand touch).

## 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		1/24/19		PRODUCT FEATURE	
REDRAWN				6SFB-30M600M-CD-SFF	
ISSUED					
SIZE	FSCM NO.	DWG NO.	REV.		
A	05XQ0	PRELIMINARY	2		
SCALE	N:S	SHEET	1 OF 1		