



## TYPICAL CHARACTERISTICS ON 8CL1860-40-CD-SFF

**PMI model number 8CL1860-40-CD-SFF is a Compline Bandpass filter with SMA female connectors in and out. All filters will be machined and silver plated to provide the highest possible Q.**

REVISIONS		DATE	APPROVED
		DESCRIPTION	
A1	ORIGINAL RELEASE	11/18/08	
A2	ECN # 14-0100	2/15/14	

  

**DESCRIPTION:**  
PMI model number 8CL1860-40-CD-SFF is a Compline Bandpass filter with SMA female connectors in and out. All filters will be machined and silver plated to provide the highest possible Q.

  

**SPECIFICATIONS:**

- CENTER FREQUENCY: . . . . . 1860 MHz Nom.
- 3dB BANDWIDTH: . . . . . 40 MHz Min.
- VSWR IN THE PASS BAND: . . . . . 1.5:1 MAX.
- INSERTION LOSS (PASSBAND): . . . . . 7 dB MAX.
- LOSS RIPPLE (PEAK TO PEAK): . . . . . 0.5 dB Max.
- REJECTION -60 dB . . . . . DC - 1800 MHz
- REJECTION -60 dB . . . . . 1920 - 4000 MHz
- CONNECTORS: . . . . . SMA FEMALE CONNECTORS
- SIZE . . . . . 2.70" (L) x 1.20" (W) x 0.500" (H)
- WEIGHT . . . . . 1 OZ. TYP.
- FINISH . . . . . GRAY EPOXY POLIMIDE COATING IAW MIL-C-22750, TYPE I OVER EPOXY POLIMIDE PRIMER IAW MIL-P-23377, TYPE I, CLASS 1 OR 3.

  

**ENVIRONMENTAL RATINGS:**

- TEMPERATURE: . . . . . -55°C TO +85°C (OPERATING)  
-85°C TO +125°C (STORAGE)
- HUMIDITY: . . . . . MIL-STD-202F, METHOD 103B COND. B
- SHOCK: . . . . . MIL-STD-202F, METHOD 213B COND. B
- VIBRATION: . . . . . MIL-STD-202F, METHOD 204D COND. B
- ALTITUDE: . . . . . MIL-STD-202F, METHOD 105C COND. B
- SALT FOG: . . . . . MIL-STD-202F, METHOD 107D COND. A
- FUNGUS: . . . . . MIL-STD-810C, METHOD 508.2
- TEMPERATURE CYCLE: . . . . . MIL-STD-202F, METHOD 107

  

ALL DIMENSIONS ARE IN INCHES  
TOLERANCES  
X.XXX ±0.020  
X.XXXX ±0.010

  

**PMI CONFIDENTIAL AND PROPRIETARY**

PART NO.		<b>PMI</b> PLANAR MONOLITHICS INDUSTRIES <small>7311 GROVE ROAD FREDERICK, MD 21704 301-662-5019 www.pmi-rf.com ISO 9001 CERTIFIED</small>	
APPROVALS	DATE	TITLE	
DESIGNED BY <i>S. PALACIO</i>	12/17/04	PRODUCT FEATURE 8CL1860-40-CD-SFF	
CHECKED		SIZE FROM NO.	DWG NO.
DESIGNED		A 05X00	27009702
		SCALE N/S	REV. A2
			SHEET 1 of 1

September 1, 2014

**Designed, Tested & Reported By:  
Sebastian Palacio**



**TYPICAL CHARACTERISTICS  
ON  
8CL1860-40-CD-SFF**

TEST ITEM NO.	PARAMETERS	SPECIFIED VALUE	MEASURED VALUE	QA/QC
1	Center Frequency:	1860 MHz Nom.	1860 MHz (See Plot)	
2	3 dB Pass band Bandwidth:	40 MHz Min.	40 MHz (See Plot)	
3	Pass band VSWR:	1.5:1 Max	1.43:1 (See Plot)	
4	Passband Insertion Loss:	7 dB Max	3.76dB (See Plot)	
5	Loss Ripple (peak to peak):	0.5 dB Max	0.1dB (See Plot)	
6	Rejection:	60 dB DC – 1800 MHz Min.	61.10dB (See Plot)	
7	Rejection:	60 dB 1920 MHz–4000 MHz	64.39dB (See Plot)	
8	Impedance (Source Load):	50 ohms Nom.	Pass	



## TYPICAL CHARACTERISTICS ON 8CL1860-40-CD-SFF

### Narrow-Band Plot



### Broad-Band Plot



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## Group Delay & Phase Linearity

