

TYPICAL CHARACTERISTICS ON BPF-437D5M542D5M-SFF-2

PMI MODEL: BPF-437D5M542D5M-SFF-2 IS A BANDPASS FILTER WITH SMA FEMALE CONNECTORS IN & OUT



Date: 9/14/2026

**Designed by:
Engineering PMI**

**Tested By:
Kevin C.**

**Reported By:
Erick C.**

TYPICAL CHARACTERISTICS ON BPF-437D5M542D5M-SFF-2

PRODUCT FEATURE

DESCRIPTION:

PMI MODEL: BPF-437D5M542D5M-SFF-2 IS A BANDPASS FILTER WITH SMA FEMALE CONNECTORS IN & OUT.

SPECIFICATIONS:

- PASSBAND FREQUENCY:..... 437.5 TO 542.5 MHz
- INSERTION LOSS:..... 2 dB MAX
- PASSBAND RIPPLE:..... 0.5 dB MAX
- VSWR:..... 1.6:1 MAX
- REJECTION:..... 20 dB MIN @ 875 TO 1627.5 MHz
50 dB MIN @ 2155 TO 3340 MHz
70 dB MIN @ 5937.5 TO 6680 MHz
50 dB MIN @ 6920 TO 20000 MHz
- INPUT POWER:..... 5 W CW MAX
- CONNECTORS:..... SMA FEMALE
- FINISH:..... PAINTED BLUE

ENVIRONMENTAL RATINGS:

- TEMPERATURE:..... -40°C TO +70°C (OPERATING)
- HUMIDITY:..... MIL-STD-202, METHOD 103 COND. B
- SHOCK:..... MIL-STD-202, METHOD 213 COND. B
- VIBRATION:..... MIL-STD-202, METHOD 204 COND. B
- ALTITUDE:..... MIL-STD-202, METHOD 105 COND. B
- TEMPERATURE CYCLE:..... MIL-STD-202, METHOD 107 COND. A

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

ZONE	REV	DESCRIPTION	DATE	APPROVED
	A1	ORIGINAL RELEASE	5/13/2024	



PMI CONFIDENTIAL AND PROPRIETARY

APPROVALS	DATE	TITLE
DRAWN E. CASTILLO	5/13/2024	OUTLINE
ISSUED		
SIZE	FIGURE NO.	REV
B	05XQ0	A1
SCALE 2:1		

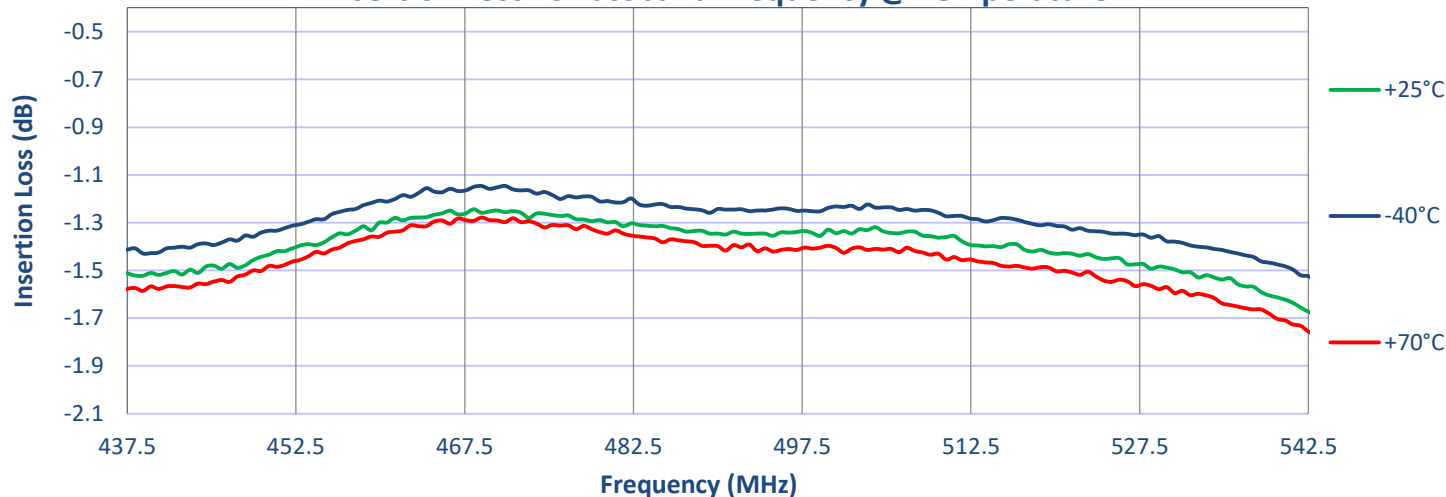
TYPICAL CHARACTERISTICS ON BPF-437D5M542D5M-SFF-2

TECHNICAL SPECIFICATIONS

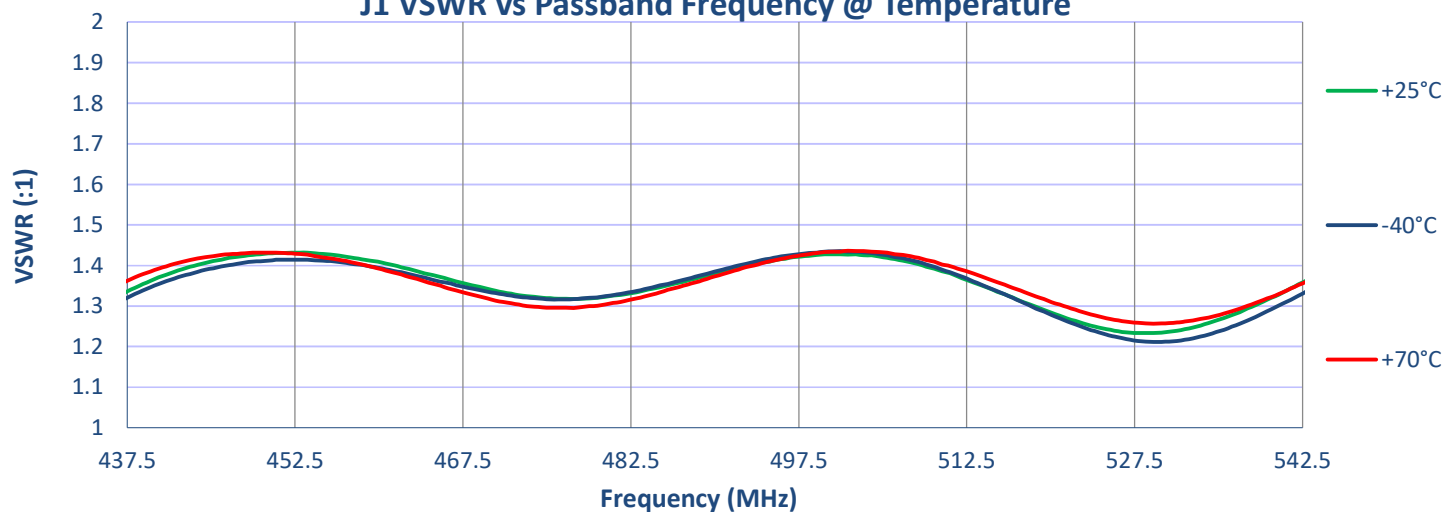
TEST ITEM	PARAMETERS	SPECIFIED VALUE	TEST RESULTS		
			-40°C	+25°C	+70°C
1	Passband Frequency	437.5 to 542.5 MHz	437.5 to 542.5 MHz		
2	Insertion Loss	2 dB Max.	1.52 dB	1.67 dB	1.76 dB
3	Passband Ripple	0.5 dB Max.	0.38 dB	0.43 dB	0.48 dB
4	VSWR	1.6:1 Max.	1.4:1	1.4:1	1.4:1
5	Rejection @ 875 to 1627.5 MHz	20 dB Min.	91.7 dB	88 dB	88.3 dB
6	Rejection @ 2155 to 3340 MHz	50 dB Min.	70.7 dB	71.5 dB	73.9 dB
7	Rejection @ 5937.5 to 6680 MHz	70 dB Min.	80.6 dB	80.4 dB	80 dB
8	Rejection @ 6920 to 20000 MHz	50 dB Min.	62.3 dB	78.6 dB	65.6 dB
9	Input Power	5 W CW Max.	5 W CW		

TYPICAL CHARACTERISTICS ON BPF-437D5M542D5M-SFF-2

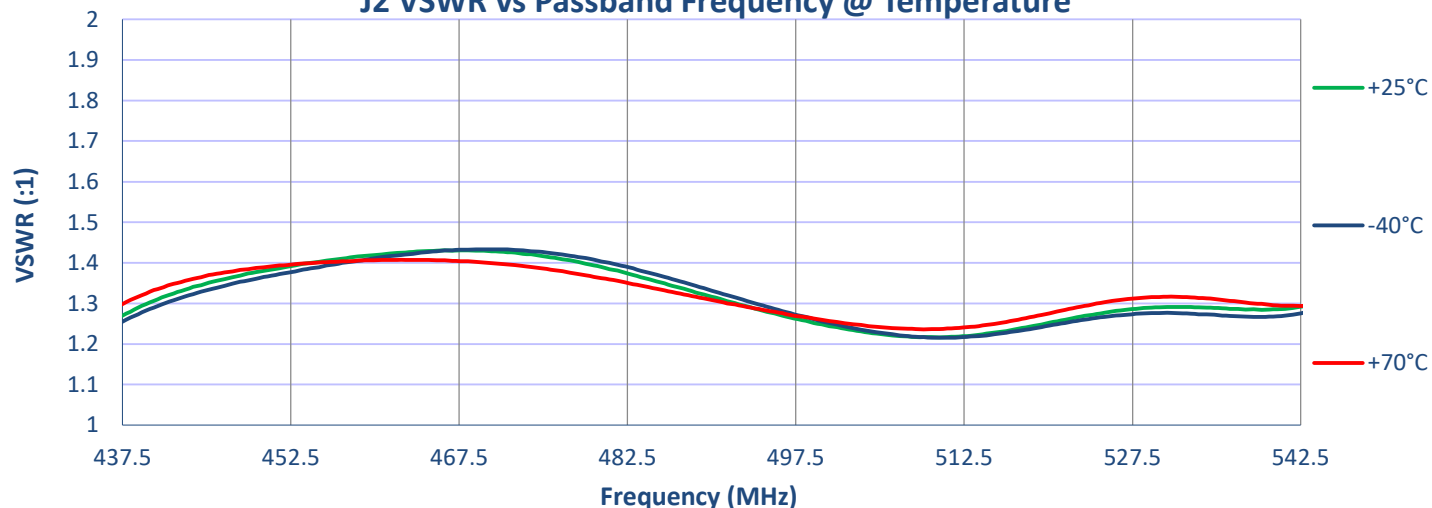
Insertion Loss vs Passband Frequency @ Temperature



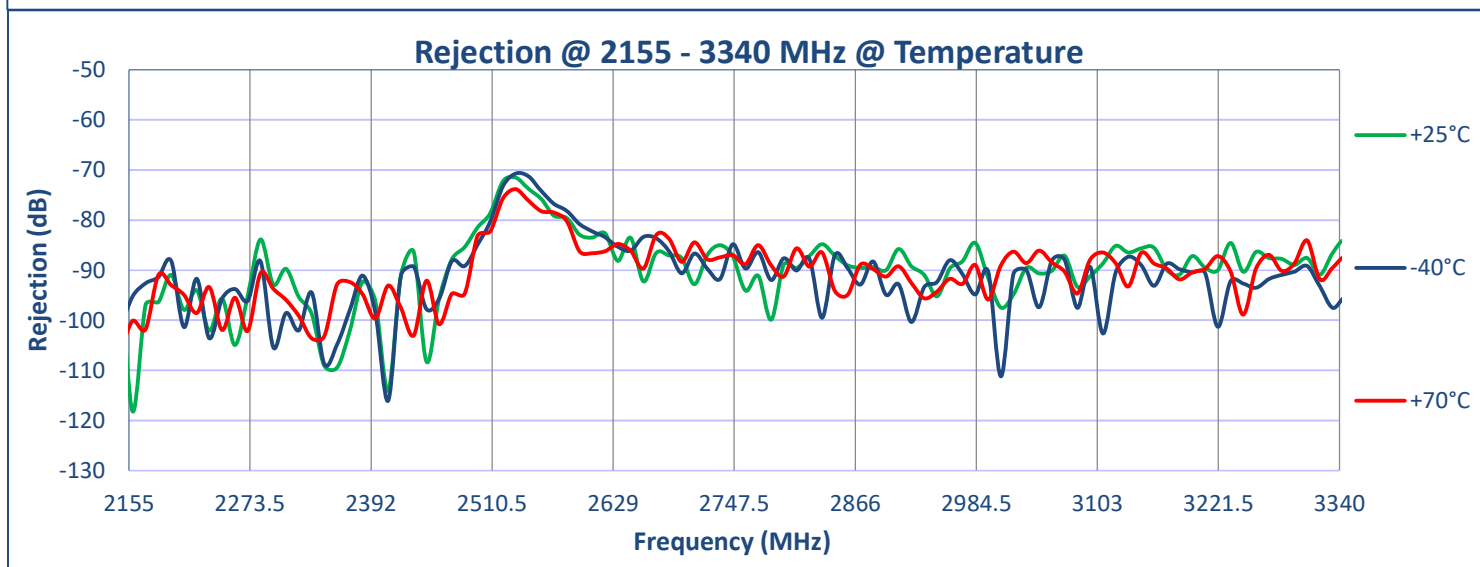
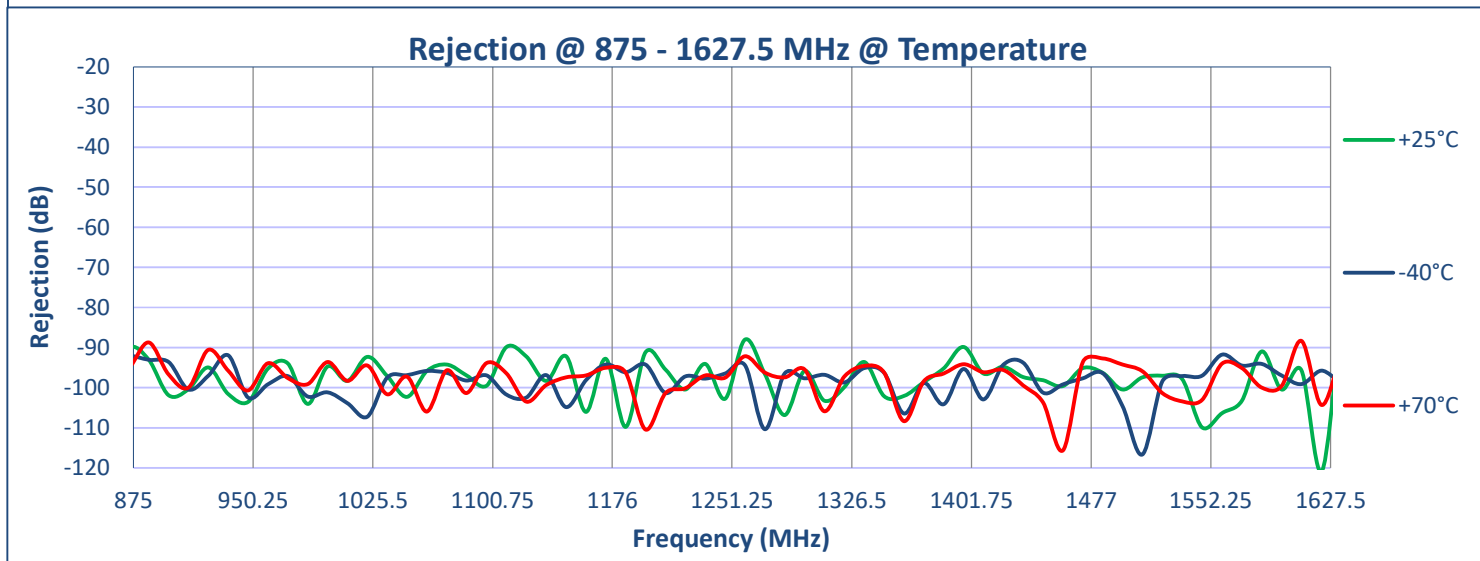
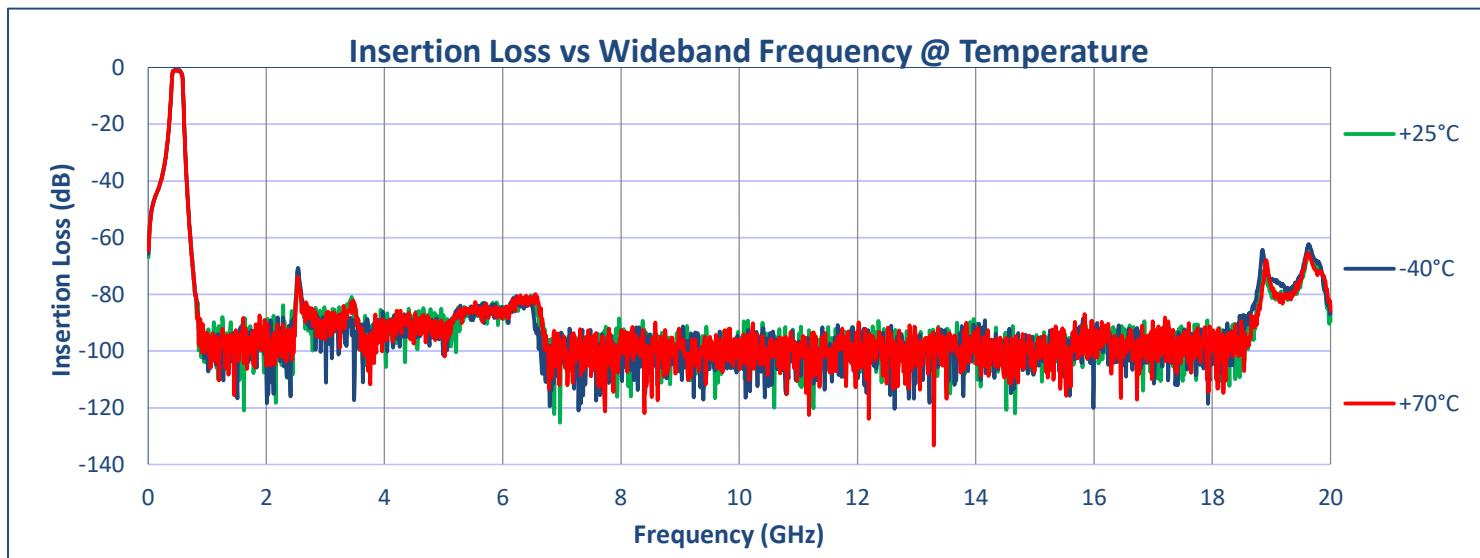
J1 VSWR vs Passband Frequency @ Temperature



J2 VSWR vs Passband Frequency @ Temperature

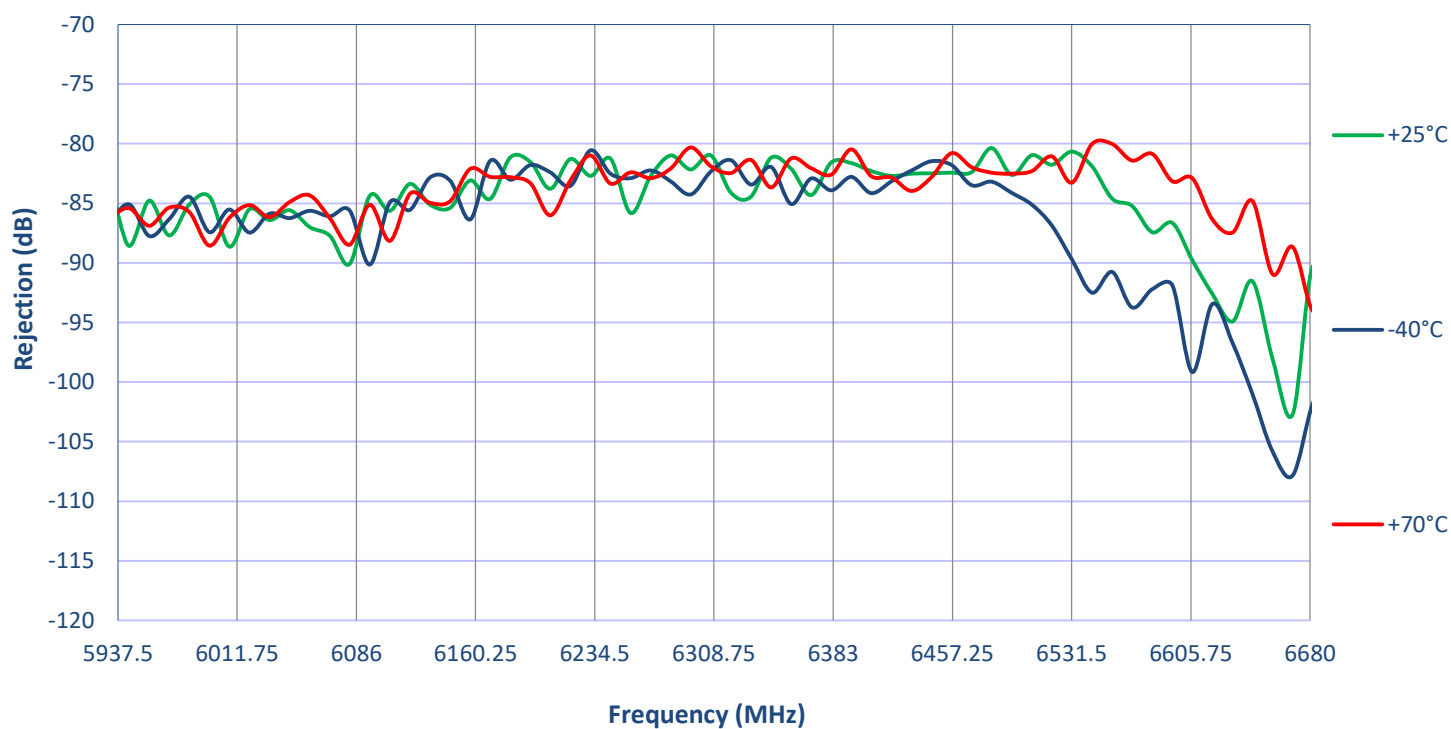


TYPICAL CHARACTERISTICS ON BPF-437D5M542D5M-SFF-2

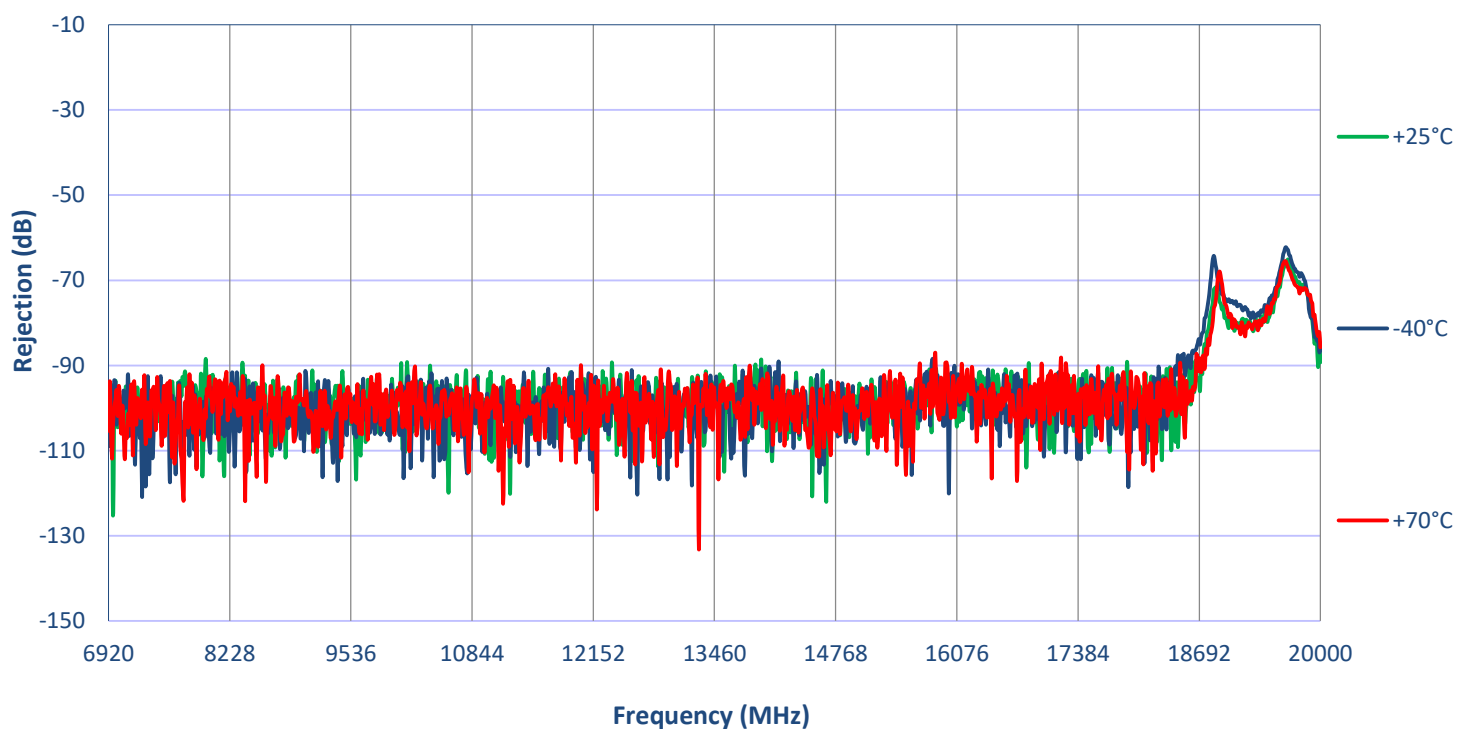


TYPICAL CHARACTERISTICS ON BPF-437D5M542D5M-SFF-2

Rejection @ 5937.5-6680 MHz @ Temperature

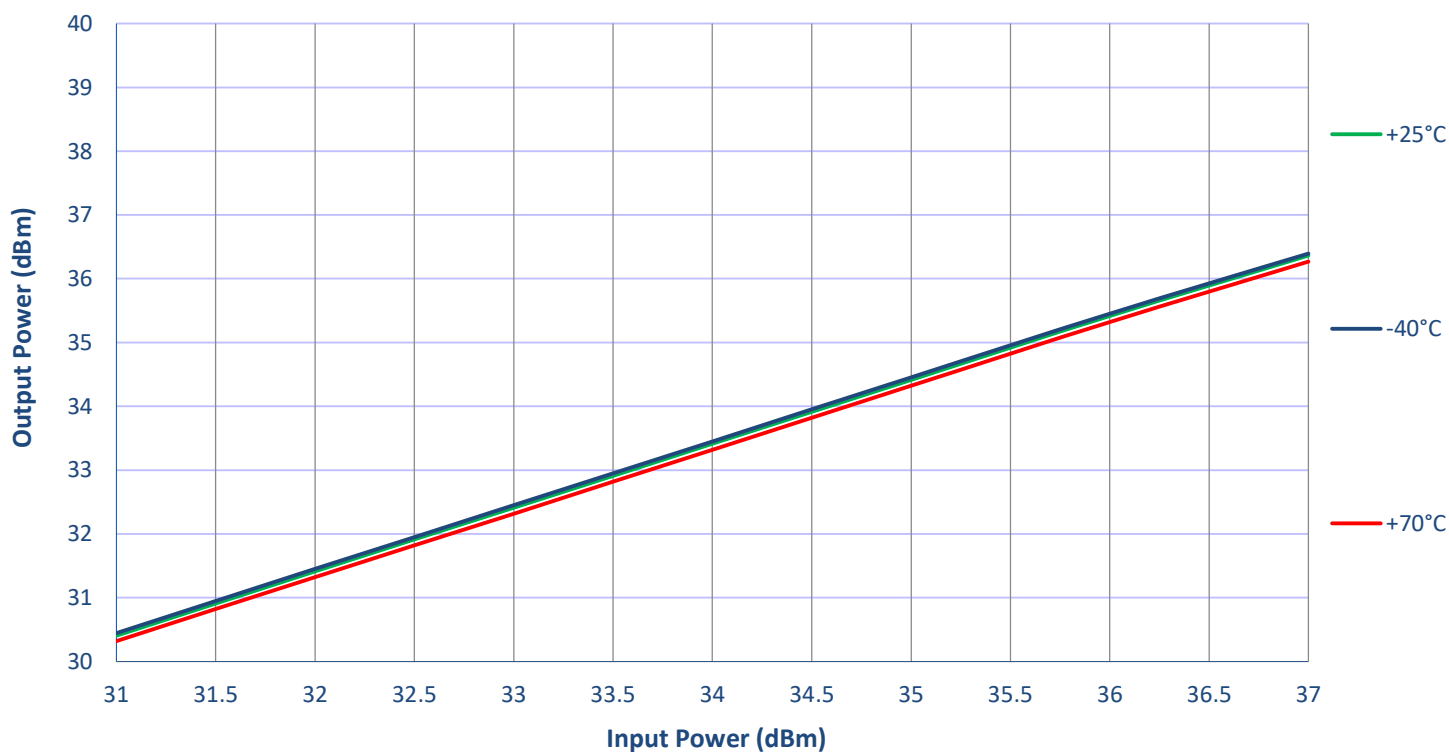


Rejection @ 6920-20000 MHz @Temperature



TYPICAL CHARACTERISTICS ON BPF-437D5M542D5M-SFF-2

Input vs Output Power @ 437.5 MHz



Input vs Output Power @ 512 MHz

