

18	Pulse Droop with pulses up to 250u in Duration and Input Signals up to -20dBm	<2.0dB	<2.0dB By Design	PMI QA1	
19	Pulse Recovery Time with pulses up to 250u in Duration and Input Signals up to -20dBm	15ns	15ns By Design		
20	Gain Switching Time	<500ns	226ns		
21	Gain Switch Control:	TTL High "1" - Max. Gain TTL Low "0" - Min. Gain	TTL High "1" - Max. Gain TTL Low "0" - Min. Gain		
22	DC Supply:	780mA Max@ +12V ±5% Max Gain Position. 610mA Max@ +12V ± 5% Min Gain Position.	453mA Max Gain	PMI QA1	
			453mA Min Gain		-25C
			446mA Max Gain		+25C
			445mA Min Gain		+75C

QA/QC  PMI QA1

DATE: 2/12/24

SUMMARY TEST DATA ON PEC-40/25-218-21-12-SFF-TTLVG Rev B

PL44458/2406

Technical Sheet

DESCRIPTION:
PLANAR MONOLITHICS INDUSTRIES MODEL NUMBER PEC-40/25-218-21-12-SFF-TTLVG IS A DUAL GAIN AMPLIFIER THAT OPERATES BETWEEN THE FREQUENCY RANGE 2 TO 18GHz.

FORM	REV	DESCRIPTION	DATE	APPROVED
A1		ORIGINAL RELEASE	4/28/05	
A5		ECN # 22-0155	8/18/05	
J1		ECN # 22-0155	10/10/05	

SPECIFICATIONS:

- FREQUENCY RANGE..... 2.0 TO 18.0 GHz
- GAIN @ -25°C
MAX GAIN POSITION..... +42dB ±2dB MAX
MIN GAIN POSITION..... +27dB ±2dB MAX
- GAIN @ +25°C
MAX GAIN POSITION..... +40dB ±2dB MAX
MIN GAIN POSITION..... +25dB ±2dB MAX
- GAIN @ +75°C
MAX GAIN POSITION..... +37dB ±2dB MAX
MIN GAIN POSITION..... +22dB ±2dB MAX
- Pout @ 1dB COMPRESSION @ -25°C
MAX GAIN POSITION..... +21dB MIN
MIN GAIN POSITION..... +20dB MIN
- Pout @ 1dB COMPRESSION @ +25°C
MAX GAIN POSITION..... +21dB MIN
MIN GAIN POSITION..... +20dB MIN
- Pout @ 1dB COMPRESSION @ +75°C
MAX GAIN POSITION..... +20dB MIN
MIN GAIN POSITION..... +20dB MIN
- SATURATED OUTPUT POWER (BOTH GAINS)
OVER OPERATING TEMP RANGE..... +26dBm MAX
- NOISE @ -25°C
MAX GAIN POSITION..... +3.8dB MAX
MIN GAIN POSITION..... +6.0dB MAX
- NOISE @ +25°C
MAX GAIN POSITION..... +4.5dB MAX
MIN GAIN POSITION..... +7.0dB MAX
- NOISE @ +75°C
MAX GAIN POSITION..... +5.0dB MAX
MIN GAIN POSITION..... +8.0dB MAX
- VSWR IN/OUT..... 2.0:1 MAX
- INPUT/OUTPUT IMPEDANCE..... 50Ω NOMINAL
- INPUT POWER (WITHOUT DAMAGE)..... +20dBm CW MAX
- IN-BAND HARMONICS @ OR BELOW THE 1dB COMPRESSION POINT..... -10dBc MIN
- SPURIOUS OUTPUT SIGNAL @ ANY SIGNAL LEVEL UP TO THE MAX INPUT LEVEL..... -90dBc MAX
- PULSE RISE TIME WITH INPUT SIGNALS UP TO 20dBm..... <5ns
- PULSE OVERSHOOT WITH INPUT SIGNALS UP TO 20dBm..... <0.5dB
- PULSE DROOP WITH THE FOLLOWING PULSES UP TO 250µs IN DURATION INPUT SIGNAL UP TO -20dBm..... <2.0dB
- PULSE RECOVERY TIME WITH THE FOLLOWING PULSES UP TO 250µs IN DURATION INPUT SIGNAL UP TO -20dBm..... 15ns
- GAIN SWITCHING TIME..... <500ns
- GAIN SWITCHING CONTROL..... TTL HIGH "1" - MAX GAIN
TTL HIGH "0" - MIN GAIN
- DC SUPPLY..... 780mA MAX @ +12V ±5% MAX GAIN POSITION
610mA MAX @ +12V ±5% MIN GAIN POSITION
- FINISH..... PAINTED BLUE (MOUNTING SURFACE FREE OF PAINT, GOLD)



ENVIRONMENTAL RATINGS:

- TEMPERATURE..... -55°C TO +85°C (OPERATING)
-65°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
- TEMPERATURE CYCLE..... MIL-STD-202F, METHOD 107D COND. A

NOTE: SPECIFICATIONS WILL VARY OVER TEMPERATURE

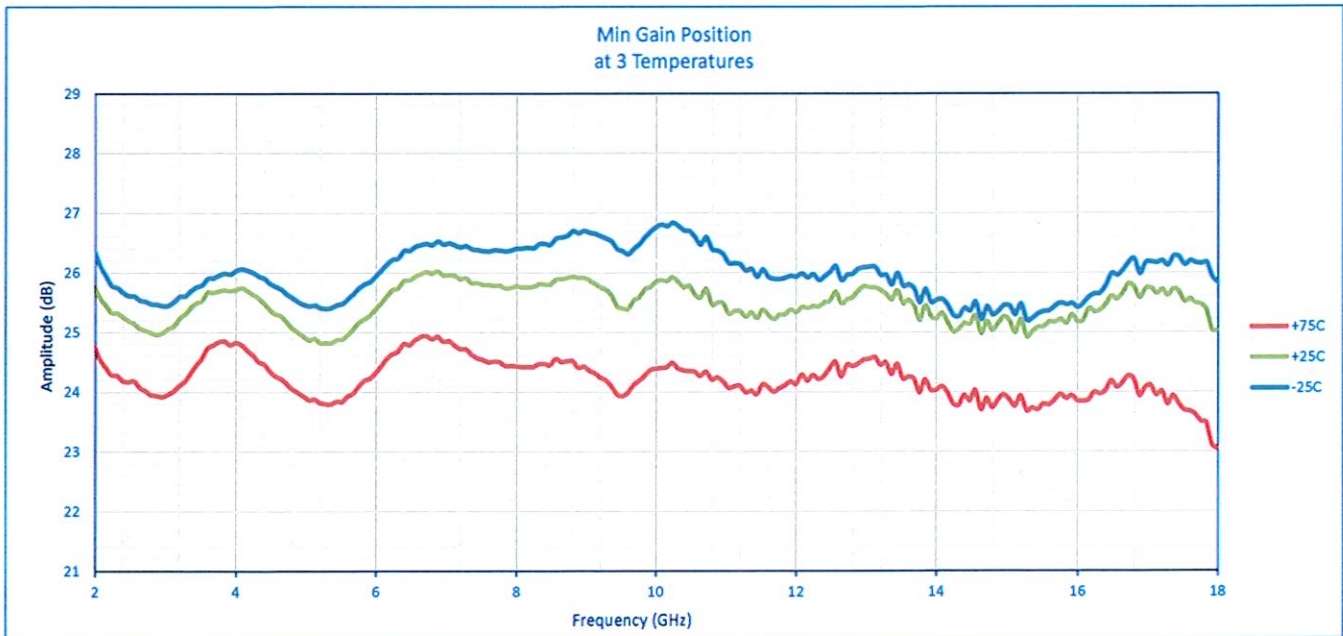
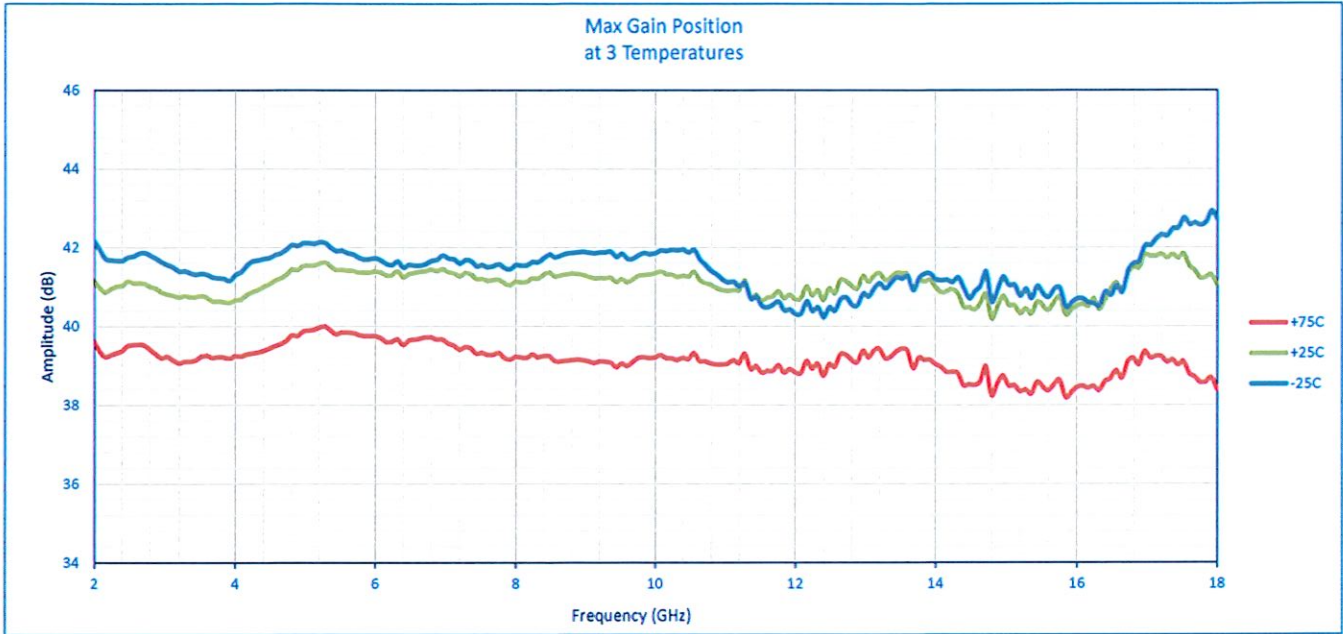
PMI CONFIDENTIAL AND PROPRIETARY

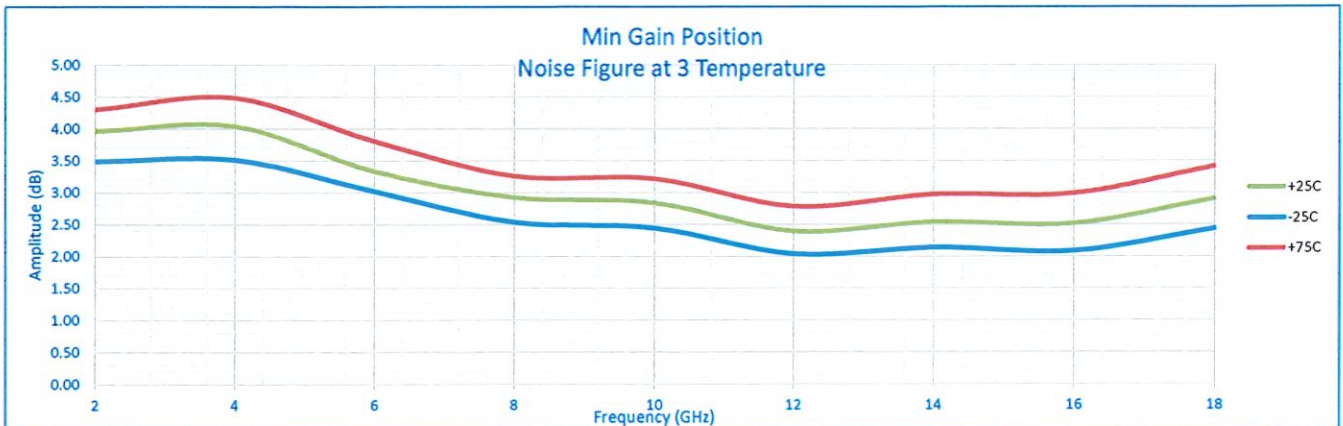
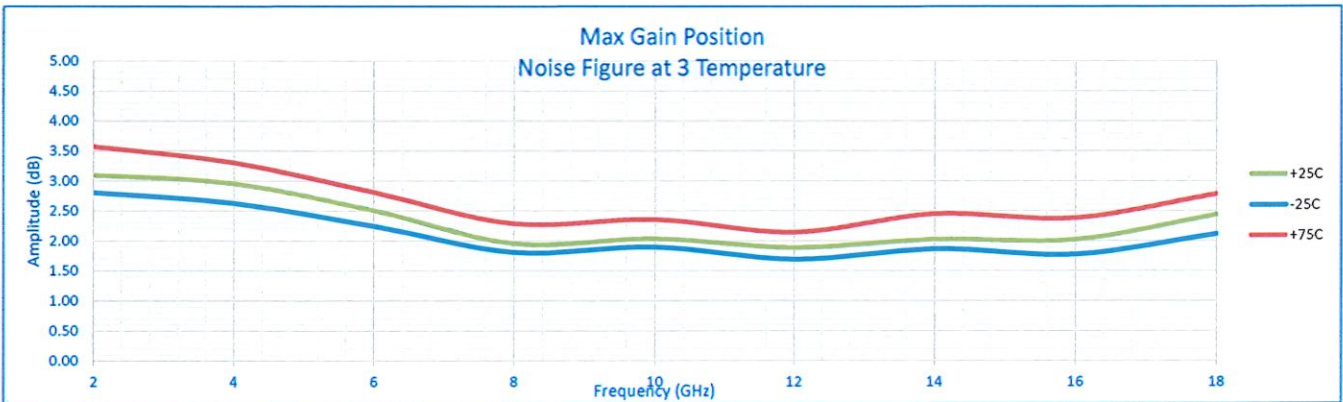
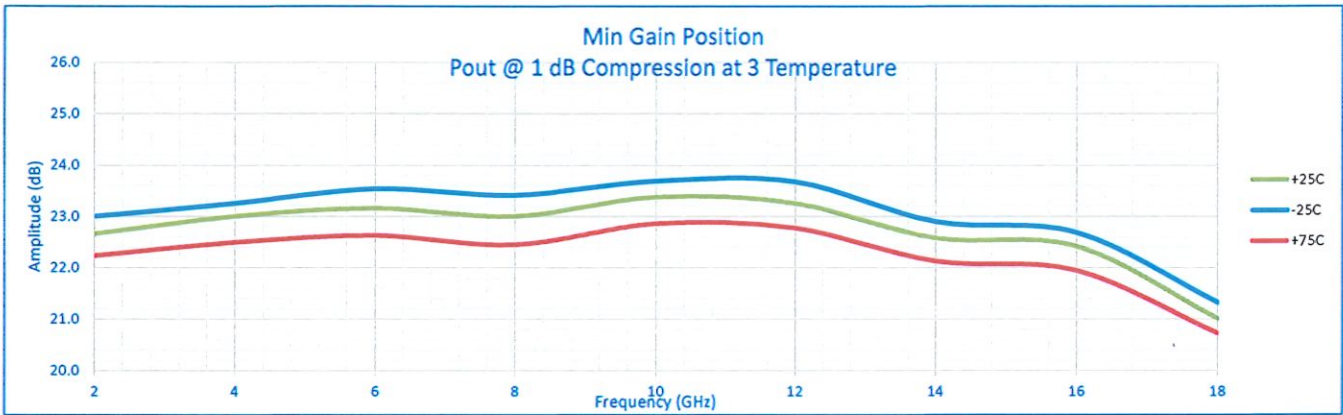
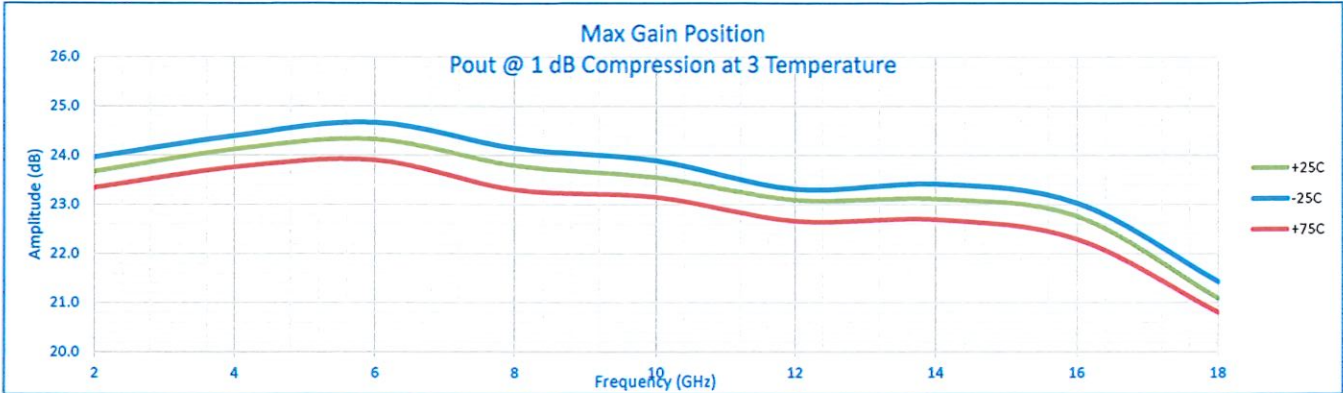
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PLANAR MONOLITHICS

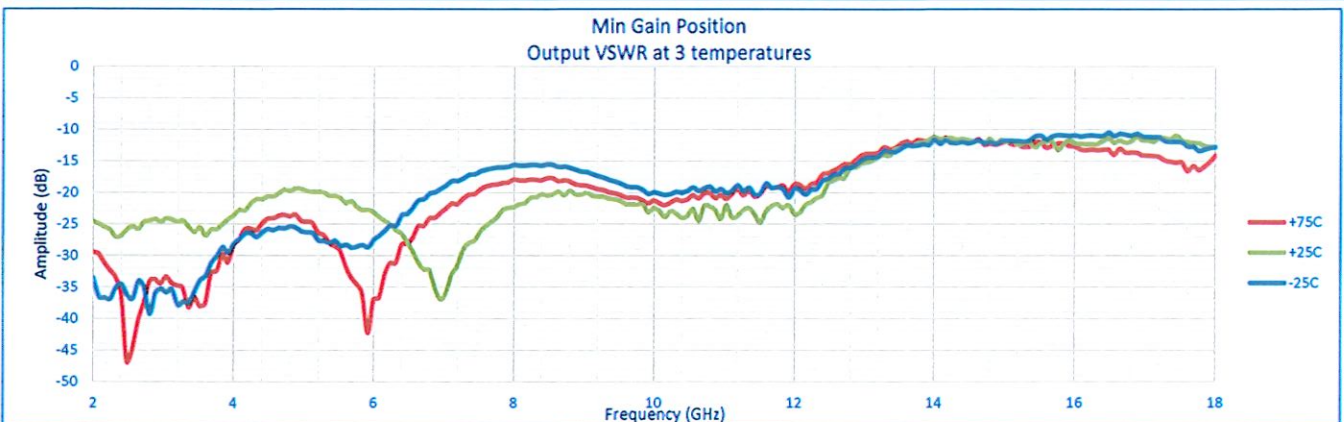
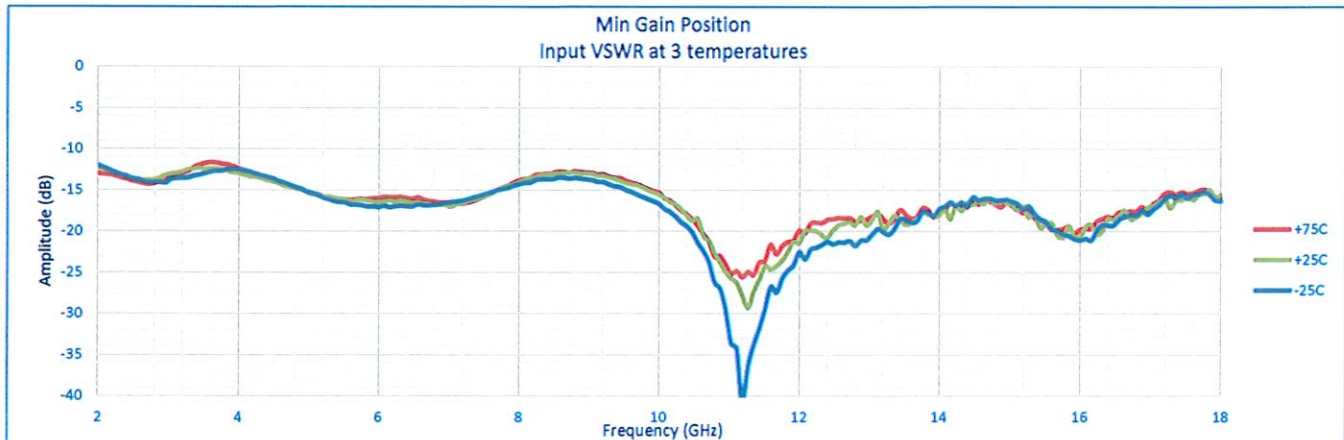
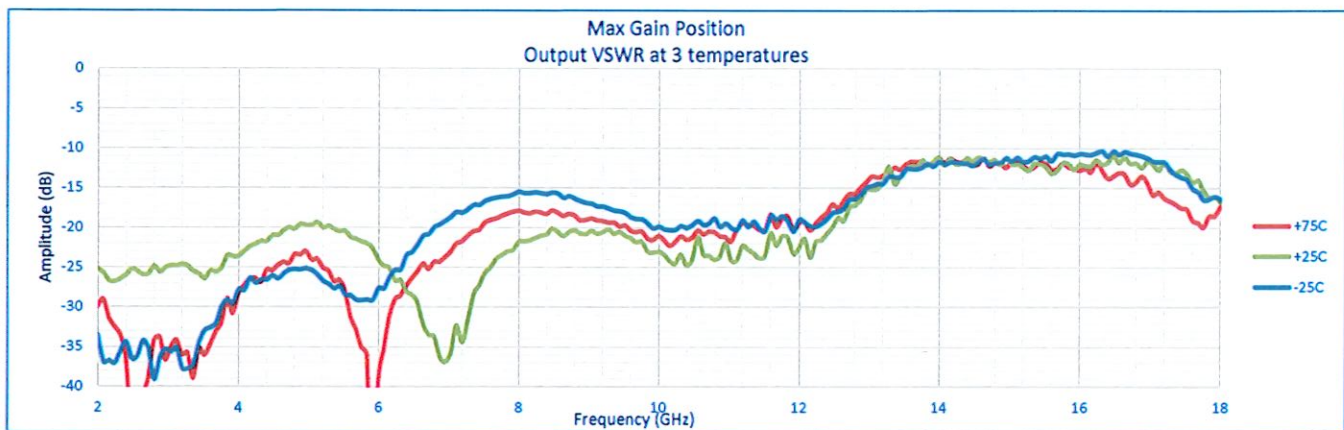
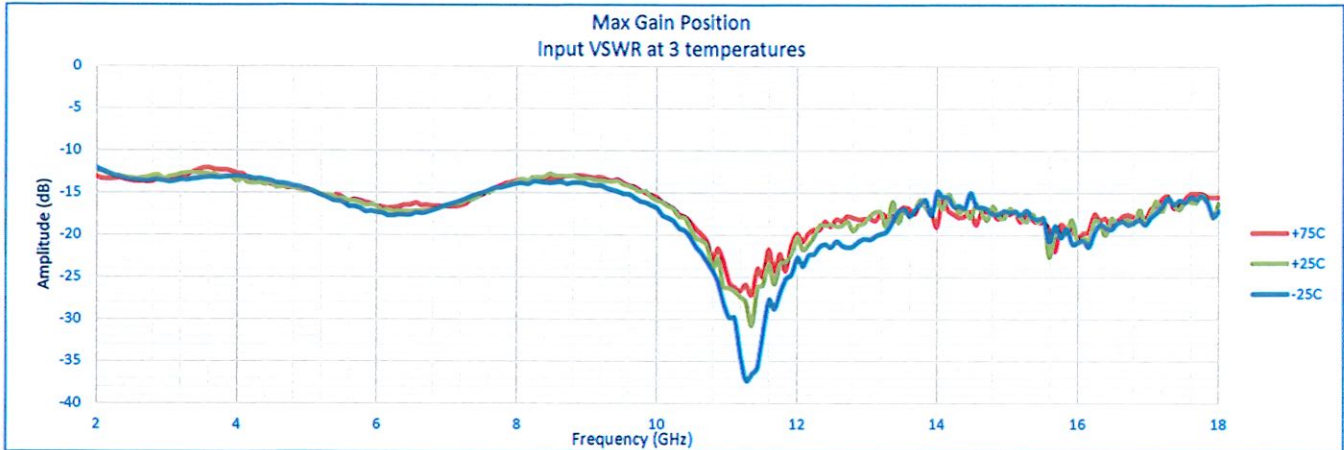
7309-A GROVE ROAD, FREDERICK, MD 21704 USA
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APPROVALS	DATE	TITLE						
M. HANKEN	4/28/05	OUTLINE						
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30%;">REVISED</td> <td style="width: 30%;">BY</td> <td style="width: 40%;">DATE</td> </tr> <tr> <td>B</td> <td>OSKGO</td> <td>27005731</td> </tr> </table>		REVISED	BY	DATE	B	OSKGO	27005731	SCALE 1:1 SHEET 1 OF 2
REVISED	BY	DATE						
B	OSKGO	27005731						

SUMMARY TEST DATA ON PEC-40/25-218-21-12-SFF-TTLVG Rev B







**SUMMARY TEST DATA
ON
PEC-40/25-218-21-12-SFF-TTLVG Rev B**

