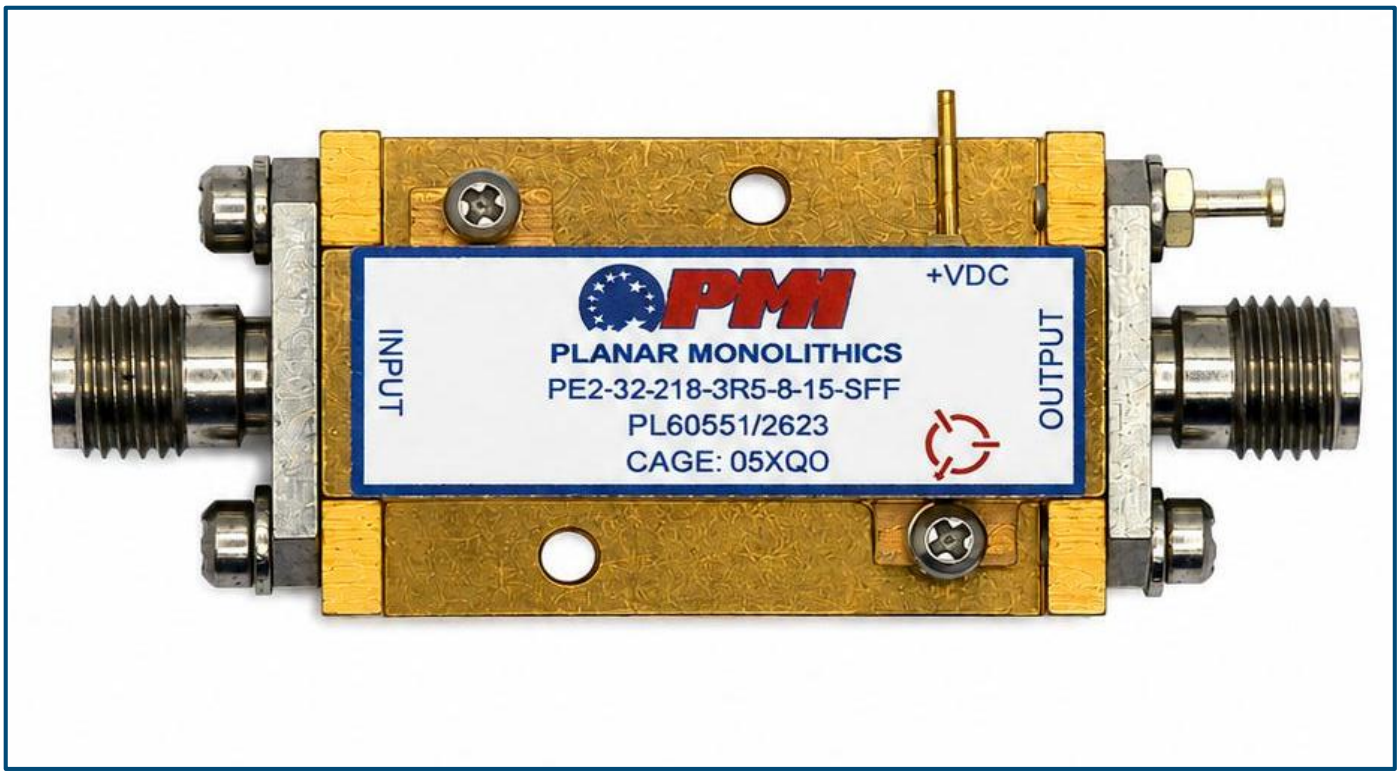
# TYPICAL CHARACTERISTICS ON PE2-32-218-3R5-8-15-SFF

**PMI MODEL NUMBER PE2-32-218-3R5-8-15-SFF IS A 2 TO 18 GHz AMPLIFIER. THIS AMPLIFIER IS SUPPLIED IN OUR STANDARD PE2 HOUSING THAT CAN BE USED AS A SMA CONNECTORIZED OR A SURFACE MOUNT COMPONENT.**




**TESTED AND REPORTED BY**
**Engineering PMI**

**TESTED AND REPORTED BY**
**V. Vasquez**

**DATE**
**June 8, 2026**

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# TYPICAL CHARACTERISTICS ON PE2-32-218-3R5-8-15-SFF

## Outline Drawing

DESCRIPTION:

PMI MODEL NUMBER PE2-32-218-3R5-8-15-SFF IS A 2 TO 18 GHz AMPLIFIER. THIS AMPLIFIER IS SUPPLIED IN OUR STANDARD PE2 HOUSING THAT CAN BE USED AS A SMA CONNECTORIZED OR A SURFACE MOUNT COMPONENT.

SPECIFICATIONS:

- FREQUENCY RANGE: ..... 2 TO 18 GHz
- GAIN: ..... 32 dB MIN
- GAIN FLATNESS: ..... ±2 dB MAX
- NOISE FIGURE: ..... 3.5 dB MAX
- OP1dB: ..... 8 dBm MIN
- VSWR (INPUT/OUTPUT): ..... 2:1 MAX
- DC VOLTAGE SUPPLY: ..... +12 TO +15 VDC
- DC CURRENT DRAW: ..... 250 mA MAX
- CONNECTORS: ..... SMA FEMALE
- FINISH: ..... GOLD PLATED

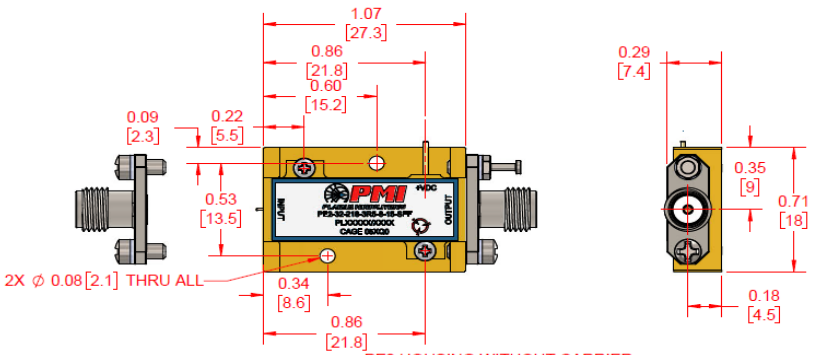
ENVIRONMENTAL RATINGS:

- TEMPERATURE: ..... -25°C TO +85°C (OPERATING)
  -55°C TO +125°C (STORAGE)
- HUMIDITY: ..... MIL-STD-202, METHOD 103 COND. B
- SHOCK: ..... MIL-STD-202, METHOD 213 COND. B
- ALTITUDE: ..... MIL-STD-202, METHOD 105 COND. B
- TEMPERATURE CYCLE: ..... MIL-STD-202, METHOD 107 COND. A

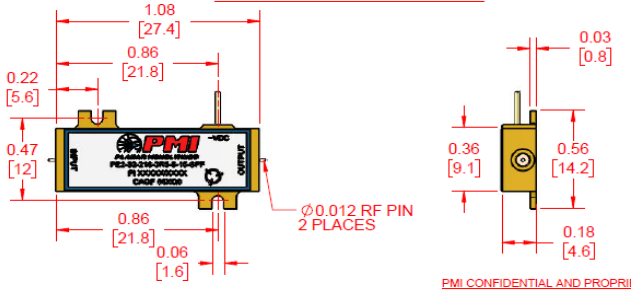
NOTE: SPECIFICATIONS WILL VARY OVER TEMPERATURE
NOTE: THE ABOVE SPECIFICATIONS ARE SUBJECT TO CHANGE OR REVISION

| ZONE | REV. | DESCRIPTION | DATE | APPROVED |
|---|---|---|---|---|
| | A1 | ORIGINAL RELEASE | 8/18/2009 | |
| | B1 | ECN # 26-0088 | 4/29/2026 | |
| | B2 | ECN # 26-0125 | 6/06/2026 | |

PE2 HOUSING WITH CARRIER




PE2 HOUSING WITHOUT CARRIER




PMI CONFIDENTIAL AND PROPRIETARY

| APPROVALS | DATE |
|---|---|
| DRAWN DPD | 9/15/2009 |
| KEDKUMO D. HOSCHAR | 4/29/2026 |
| ISSUED | |

TITLE: OUTLINE
PE2-32-218-3R5-8-15-SFF
SIZE B | FSCM NO. 05XQ0 | DWG NO. 27010141 | REV. B2
SCALE 2:1 | SHEET 1 OF 1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PLANAR MONOLITHICS

# TYPICAL CHARACTERISTICS ON PE2-32-218-3R5-8-15-SFF

## Technical Specifications

| TEST ITEM NO. | PARAMETERS | SPECIFIED VALUE | Test Results | | |
|---|---|---|---|---|---|
| | | | -55°C | +25°C | +85°C |
| 1 | Frequency Range: | 2 GHz to 18 GHz | **2 GHz to 18 GHz** | **2 GHz to 18 GHz** | **2 GHz to 18 GHz** |
| 2 | Gain: | 32.0 dB Min | **+37.4 dB Min.** | **+36.4 dB Min.** | **+35.3 dB Min.** |
| | | | **+39.4 dB Max.** | **+37.9 dB Max.** | **+37.2 dB Max.** |
| | | | **See Graph** | **See Graph** | **See Graph** |
| 3 | Gain Flatness: | ±2 dB Max | **± 0.99 dB See Graph** | **± 0.79 dB See Graph** | **± 0.95 dB See Graph** |
| 4 | Noise Figure: | 3.5 dB Max | **3.2 dB See Graph** | **3.4 dB See Graph** | **3.3 dB See Graph** |
| 5 | OP1dB: | 8.0 dBm Min | **+11.2 dBm See Graph** | **+10.7 dBm See Graph** | **+10.2 dBm See Graph** |
| 6 | Psat: | 11.0 dBm Min | **+11.2 dBm** | **+11.1 dBm** | **+11 dBm** |
| 7 | Harmonics: | Not Specified | **2nd Harm: -33.7 dBc 3rd Harm: -46.1 dBc Pin @ -40dBm** | **2nd Harm: -37.2 dBc 3rd Harm: -50.7 dBc Pin @ -40dBm** | **2nd Harm: -38.1 dBc 3rd Harm: -66.5 dBc Pin @ -40dBm** |
| | | | **2nd Harm: -18 dBc 3rd Harm: -24.5 dBc Pin @ P1dB** | **2nd Harm: -20.7 dBc 3rd Harm: -29.5 dBc Pin @ P1dB** | **2nd Harm: -20.5 dBc 3rd Harm: -31.1 dBc Pin @ P1dB** |
| | | | **2nd Harm: -16.8 dBc 3rd Harm: -18 dBc Pin @ PSAT** | **2nd Harm: -17.2 dBc 3rd Harm: -20.2 dBc Pin @ PSAT** | **2nd Harm: -17.7 dBc 3rd Harm: -21.2 dBc Pin @ PSAT** |
| 8 | OIP3: | Not Specified | **+19.5 dBm See Graph** | **+20.8 dBm See Graph** | **+20.2 dBm See Graph** |
| 9 | Max RF Input Power | Not Specified | **+20 dBm** | **+20 dBm** | **+20 dBm** |
| 10 | VSWR In: | 2.0 :1 Max | **1.8 :1 See Graph** | **1.8 :1 See Graph** | **1.7 :1 See Graph** |
| 11 | VSWR Out: | 2.0 :1 Max | **1.5 :1 See Graph** | **1.5 :1 See Graph** | **1.5 :1 See Graph** |
| 12 | DC Supply: | **+12V to +15V @250 mA Max** | **+12 to +15 VDC @ 198 mA** | **+12 to +15 VDC @ 209 mA** | **+12 to +15 VDC @ 211 mA** |
| 13 | DC Supply: | **+12V to +15V (Psat)** | **+12 to +15 VDC @ 200 mA** | **+12 to +15 VDC @ 213 mA** | **+12 to +15 VDC @ 220 mA** |

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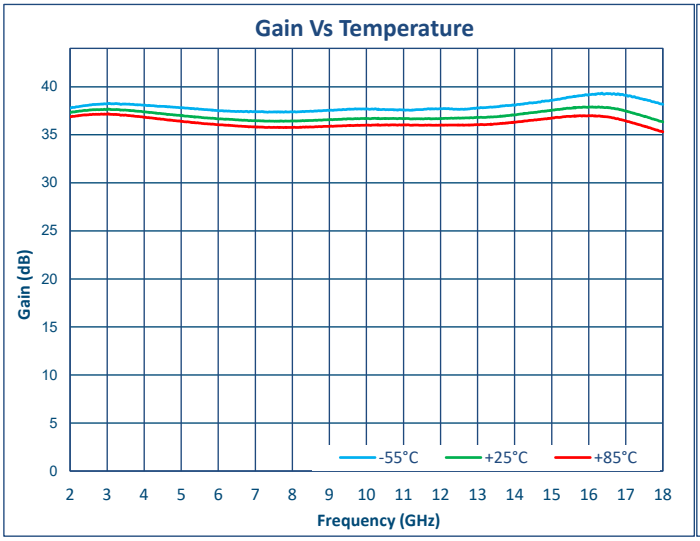


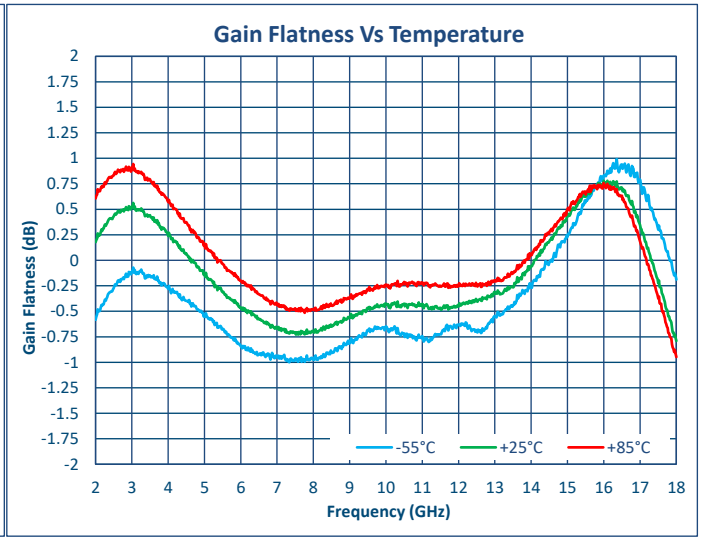


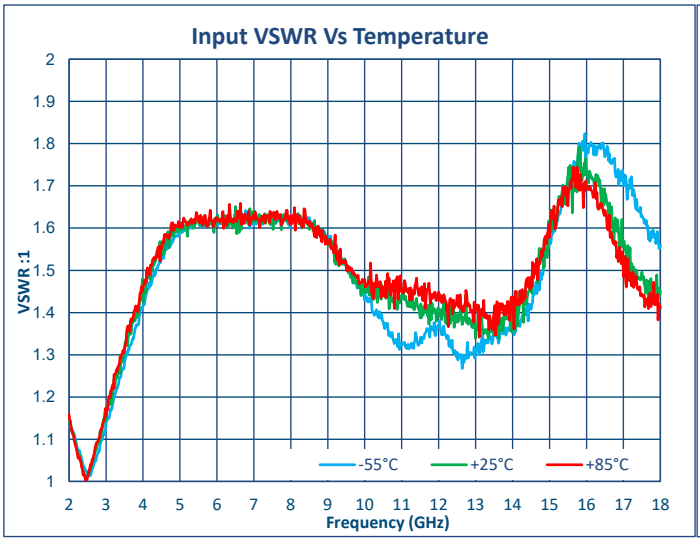


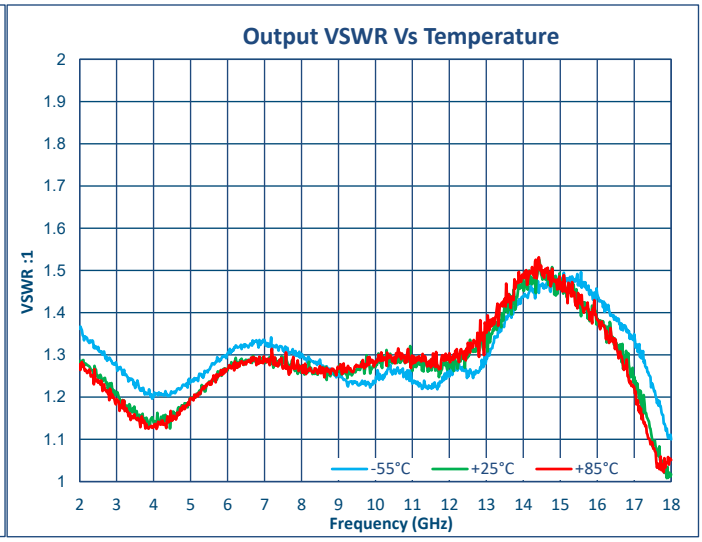


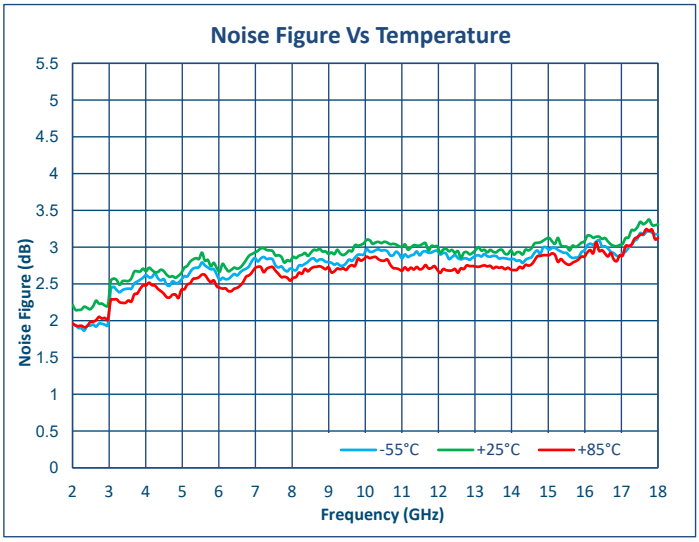


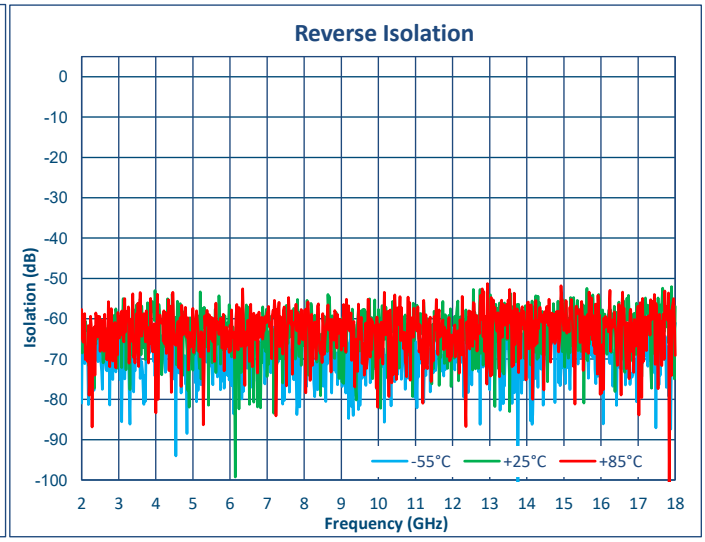


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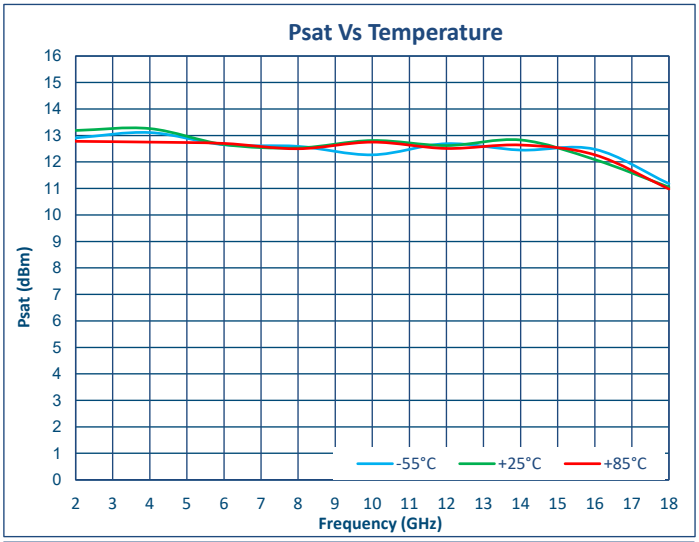


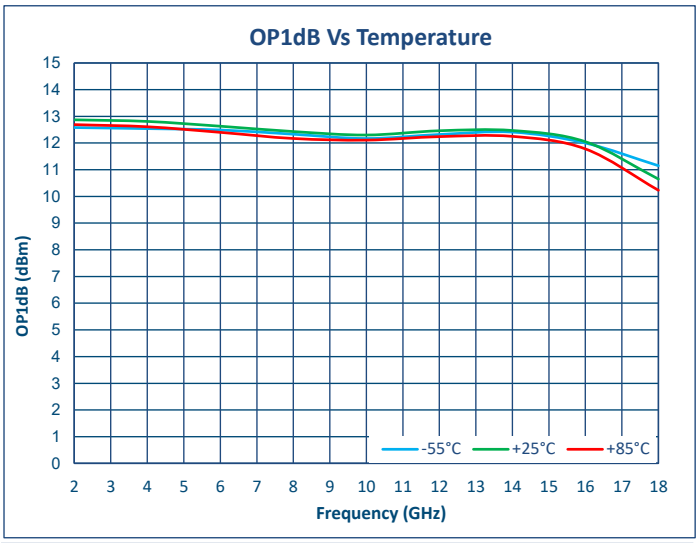


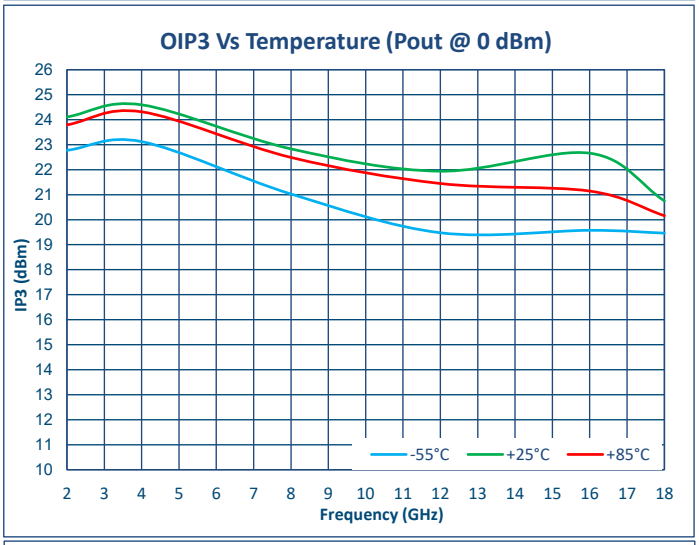


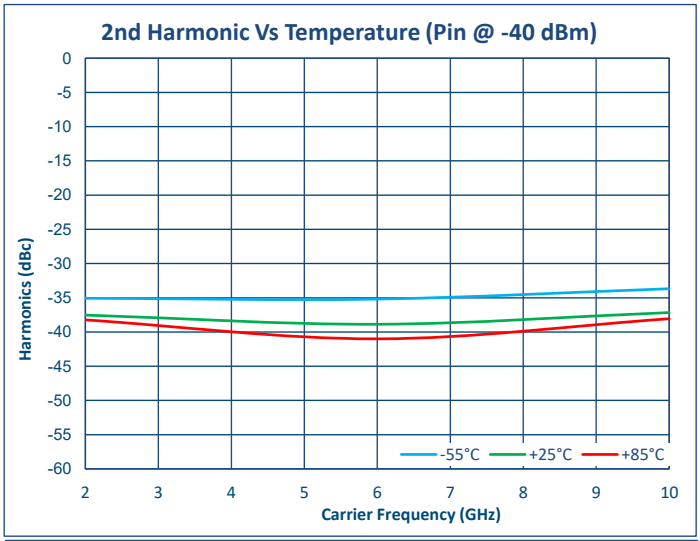


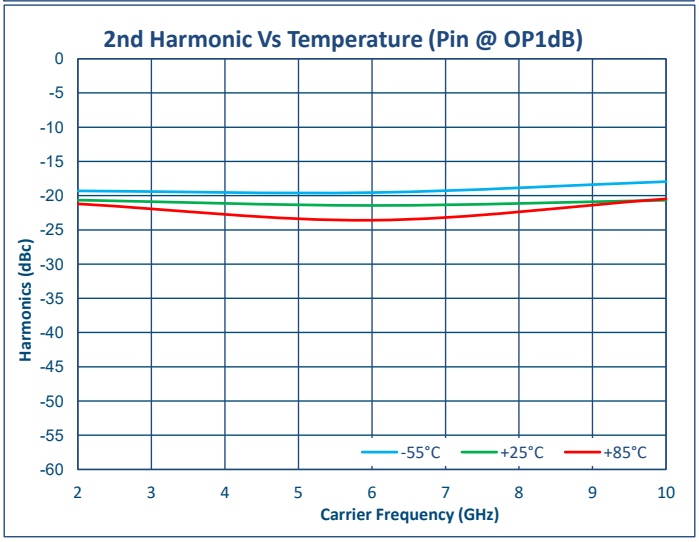


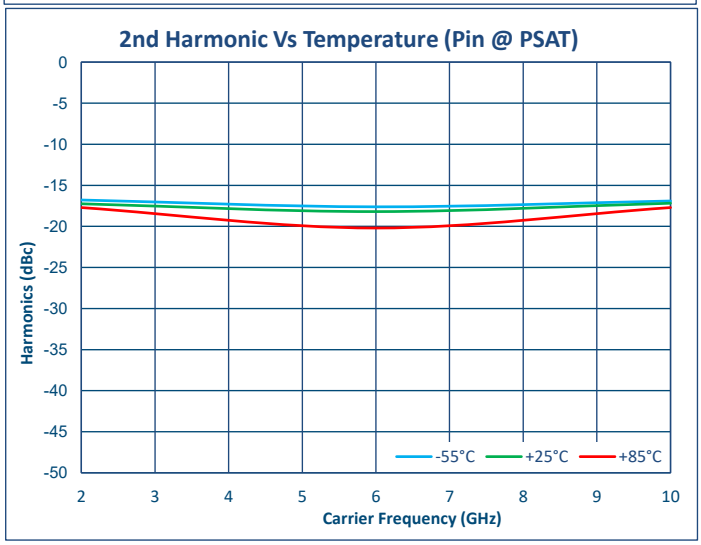


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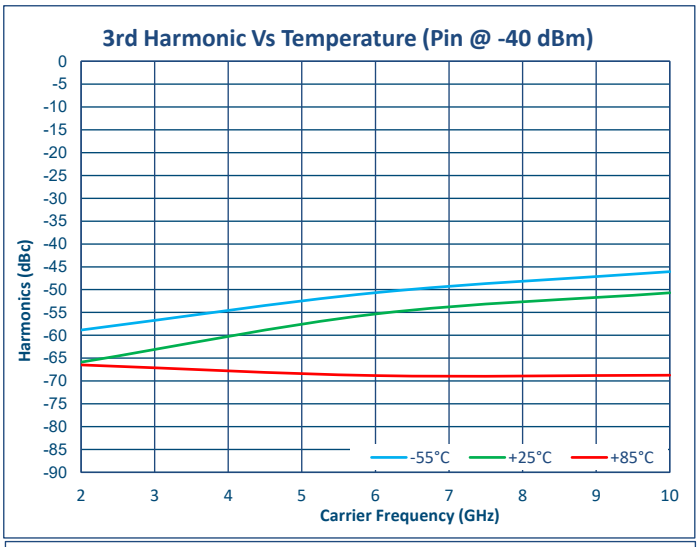


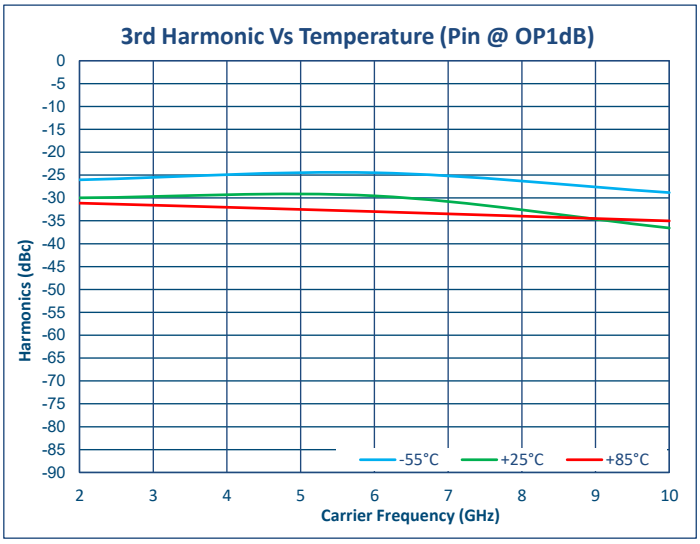


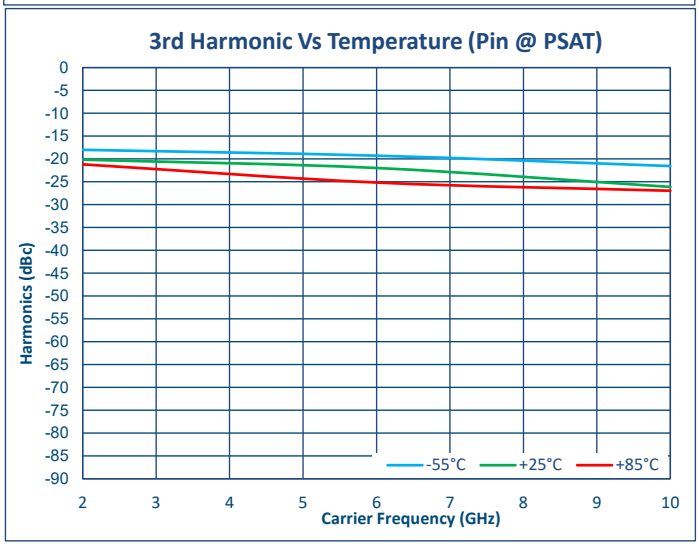


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