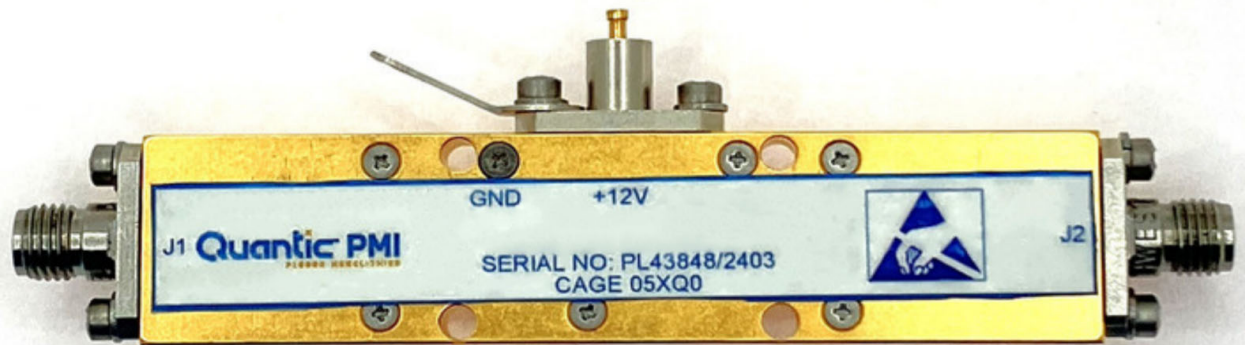


PMI MODEL NO. PLNA-42D5-8G18G-5NF-15DBM-12V-SFF IS AN AMPLIFIER THAT
MEETS THE SPECIFICATIONS BELOW.



Reported by
J Escano
7/15/25

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**TYPICAL CHARACTERISTICS
ON
PLNA-42D5-8G18G-5NF-15DBM-12V-SFF**

PRODUCT FEATURE

DESCRIPTION:

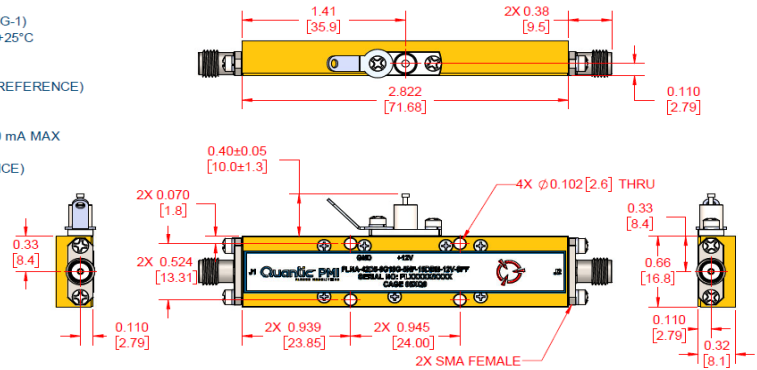
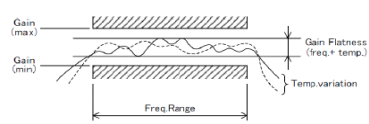
PMI MODEL NO. PLNA-42D5-8G18G-5NF-15DBM-12V-SFF IS AN AMPLIFIER THAT MEETS THE SPECIFICATIONS BELOW.

| ZONE | REV. | DESCRIPTION | DATE | APPROVED |
|------|------|------------------|--------|----------|
| | A1 | ORIGINAL RELEASE | 201008 | |

SPECIFICATIONS:

- FREQUENCY RANGE:..... 8.0 TO 18.0 GHz
- GAIN (MIN - MAX):..... +39 dB MIN TO +46 dB MAX
- GAIN FLATNESS:..... ±2.5 dB MAX
- NOISE FIGURE:..... 4.0 dB MAX @ +25°C
5.0 dB MAX
- SATURATED OUTPUT POWER:..... +15 dBm MIN
IP3:..... +23 dBm TYP (REFERENCE)
- HARMONICS AT +5 dBm INPUT:..... -9 dBc MAX
- VSWR (INPUT/OUTPUT):..... 2.0:1 MAX
- DC POWER SUPPLY:..... +12 VDC @ 450 mA MAX
- FINISH:..... GOLD PLATED
- WEIGHT:..... 60 g (REFERENCE)

Fig-1



ENVIRONMENTAL RATINGS:

- TEMPERATURE:..... -20°C TO +90°C: ALL SPEC MEET (OPERATING)
-20°C TO +115°C: NO DAMAGE (OPERATING)
-30°C TO +95°C (STORAGE)
- HUMIDITY:..... 95%RH AT +45°C
- VIBRATION:..... 5mm PEAK TO PEAK AT 2 TO 5 Hz
1.5mm PEAK TO PEAK AT 5 TO 10 Hz
3mm PEAK TO PEAK AT 10 TO 25 Hz
ALL 3 AXES, 2 HOURS EACH
- SHOCK:..... 20g AT 11ms

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

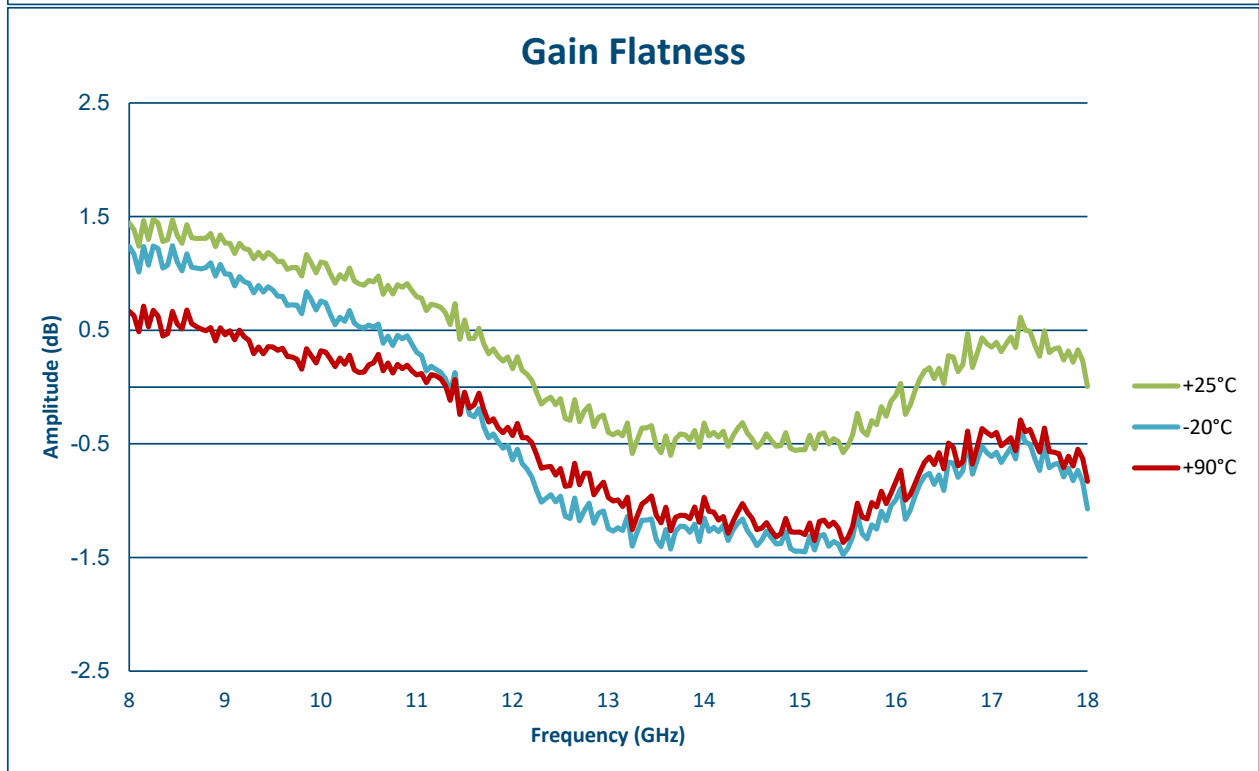
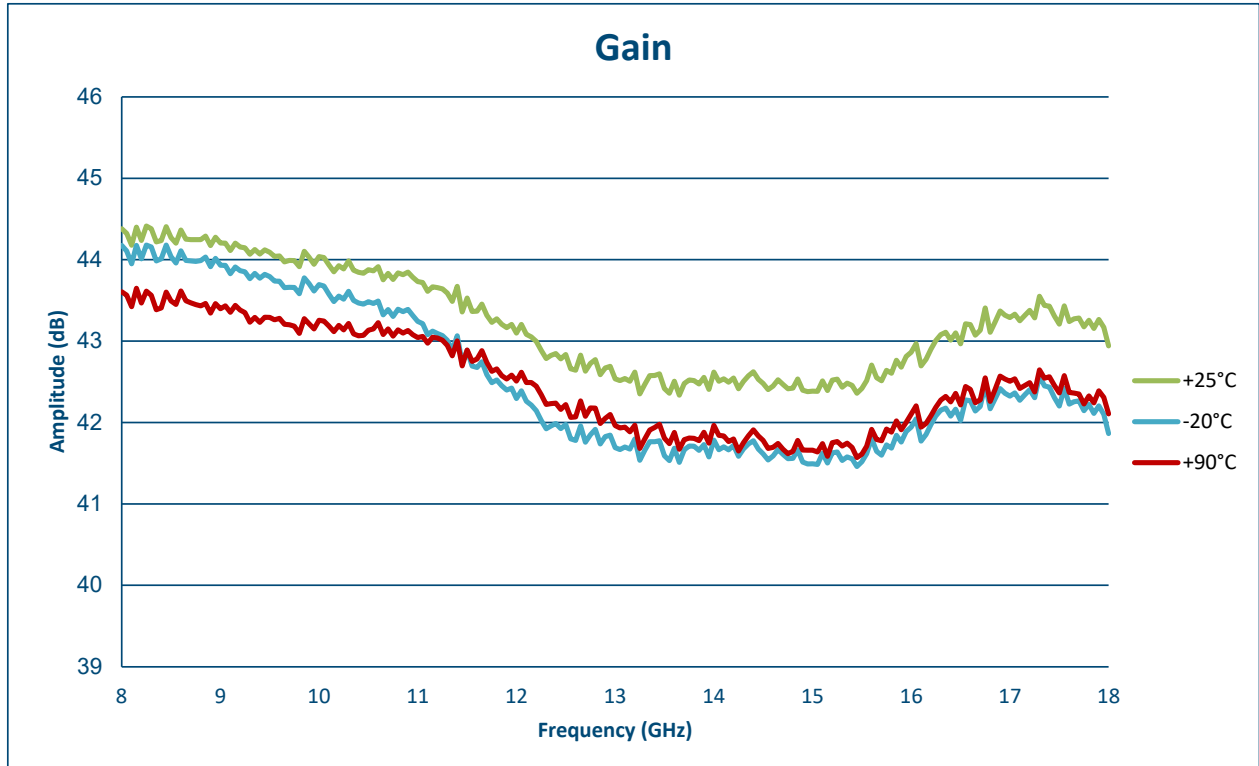
PMI CONFIDENTIAL AND PROPRIETARY

| APPROVALS | | DATE | Quantic PMI | |
|-------------|-----------|--------|------------------------------------|--------------|
| DESIGNED BY | J. ESCANO | 201008 | PLANA-42D5-8G18G-5NF-15DBM-12V-SFF | OUTLINE |
| REVIEWED BY | | | PLANA-42D5-8G18G-5NF-15DBM-12V-SFF | |
| DATE | | | B 05XGG | 27051020 |
| | | | | A.1 |
| | | | SCALE 3:2 | SHEET 1 OF 1 |

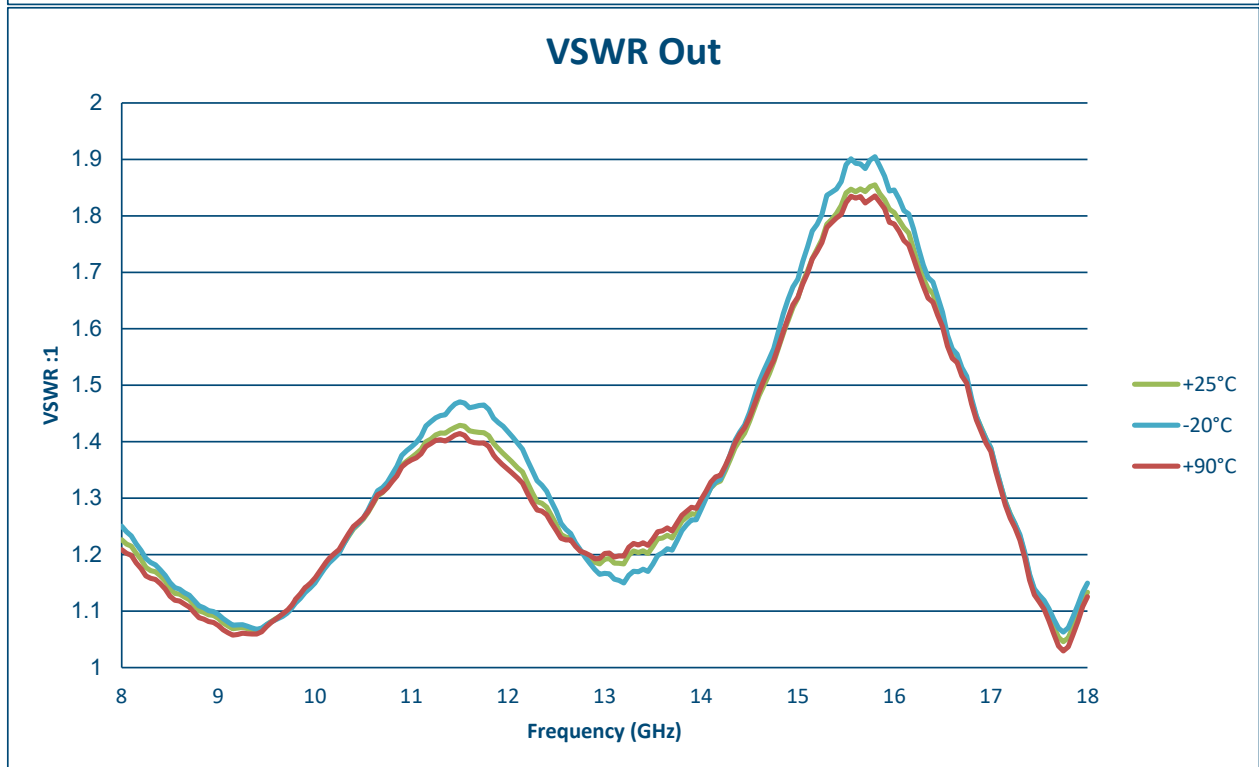
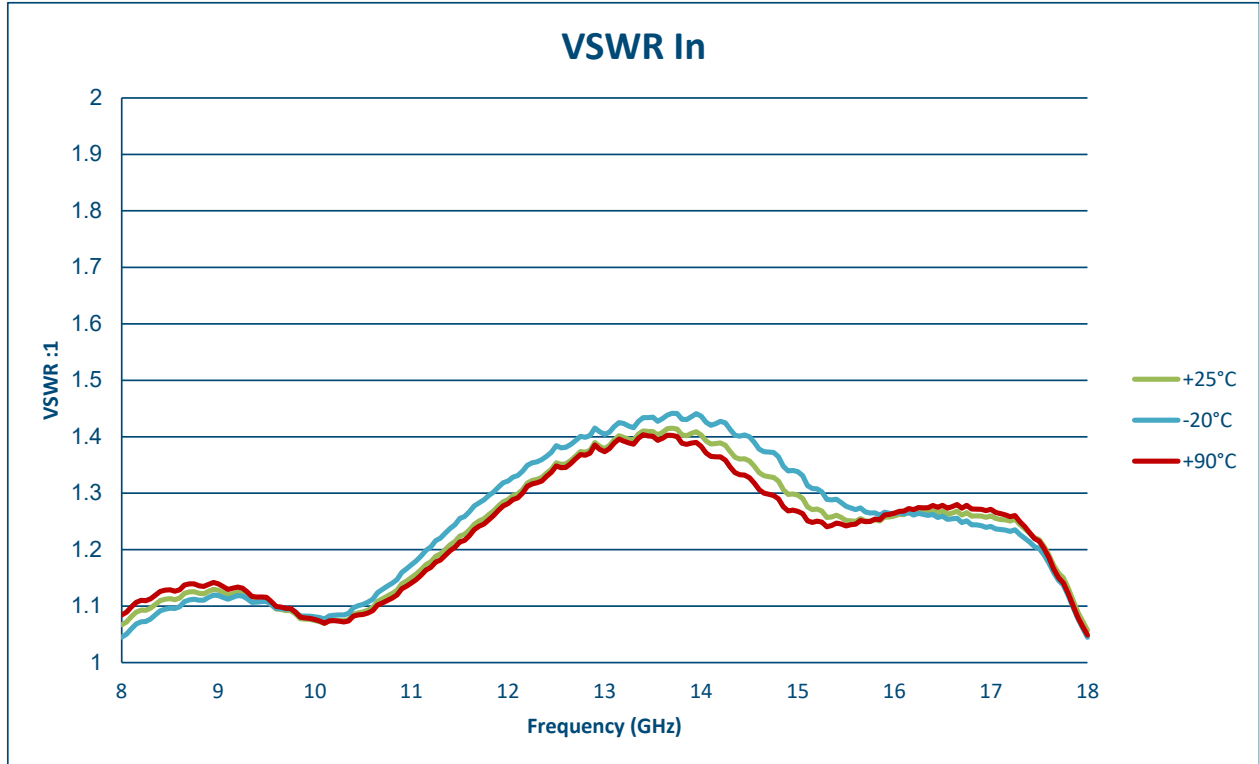
TYPICAL CHARACTERISTICS
ON
PLNA-42D5-8G18G-5NF-15DBM-12V-SFF

TEST SPECIFICATIONS

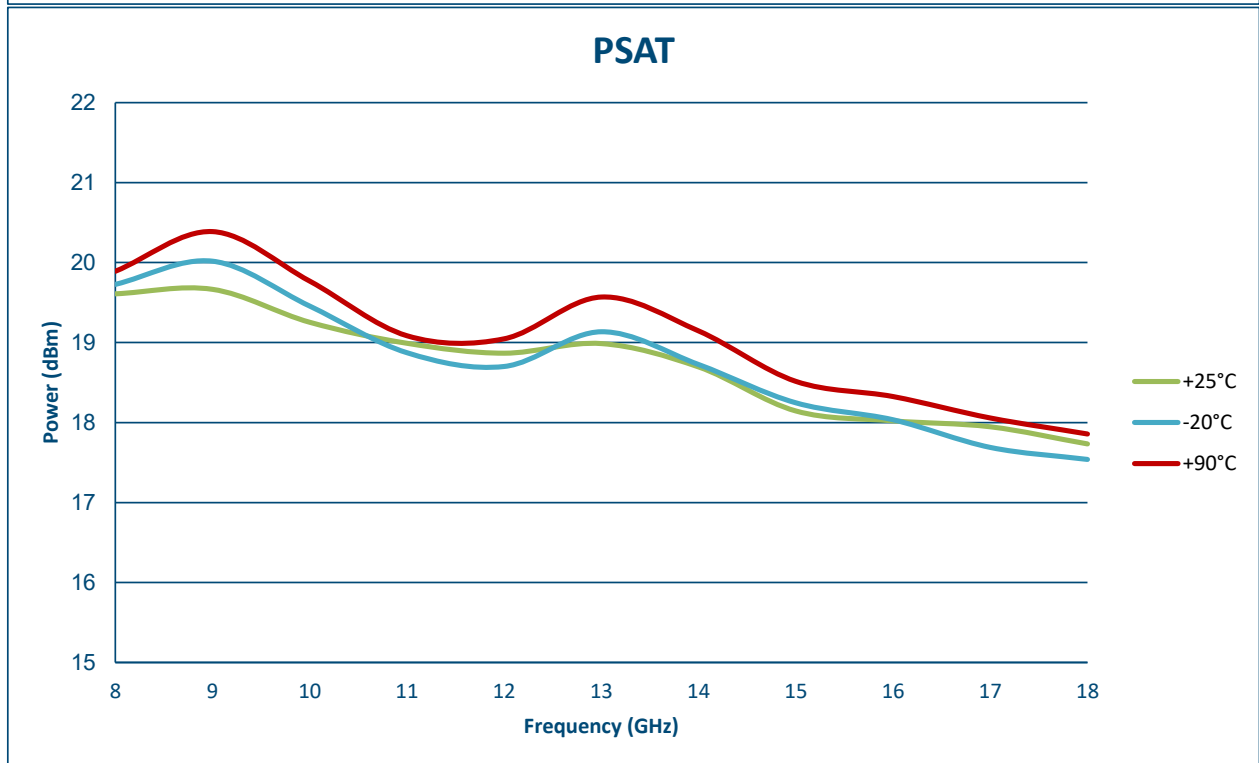
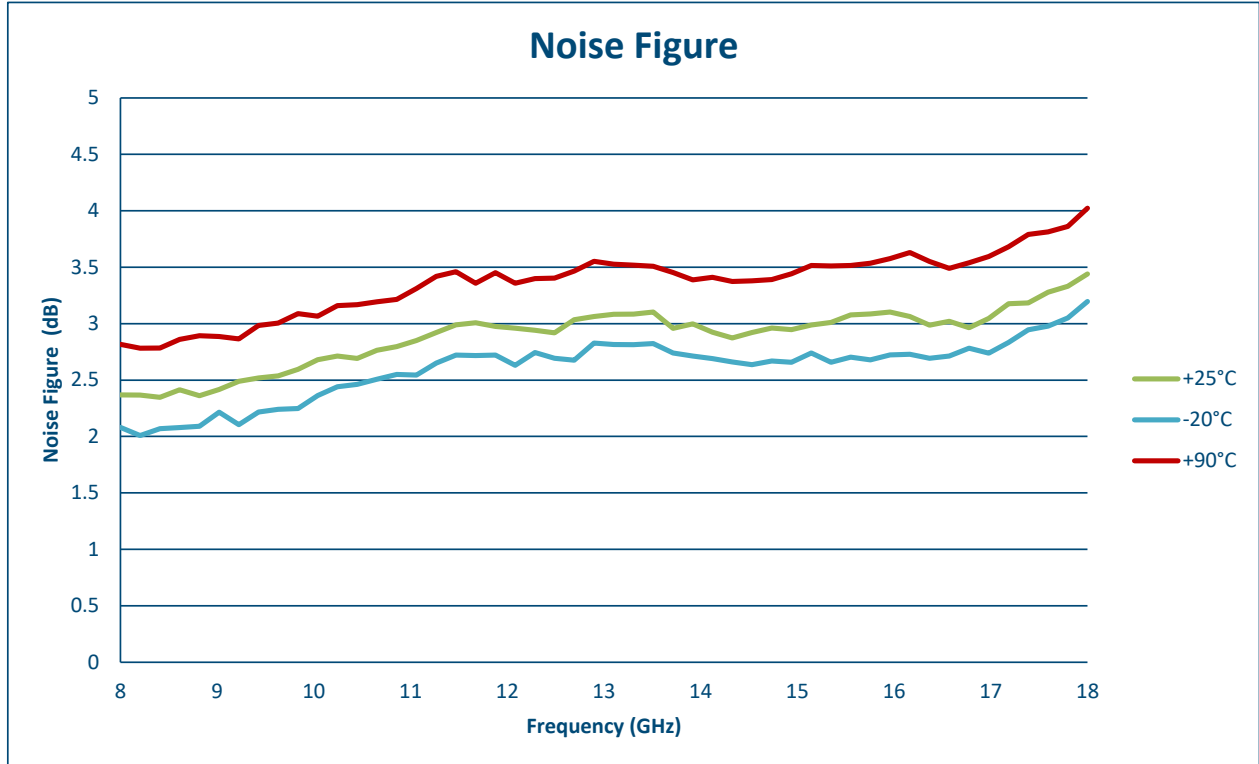
| TEST ITEM NO. | PARAMETERS | SPECIFIED VALUE | TEST RESULTS | | |
|---------------|---------------------------|---------------------------------------|--|--|--|
| | | | +25°C | -20°C | +90°C |
| 1 | Frequency Range | 8.0 - 18.0 GHz | 8.0 - 18.0 GHz | | |
| 2 | Gain (Min-Max) | +46 dB Max. +39 dB Min. | +44.4 dB Max +42.3 dB Min | +44.2 dB Max +41.5 dB Min | +43.6 dB Max +41.6 dB Min |
| 3 | Gain Flatness | ±2.5 dB Max. | ±1.48 dB | | |
| 4 | Noise Figure | 4.0 dB Max. @ +25°C 5.0 dB Max. | 3.4 dB | 3.2 dB | 4 dB |
| 5 | Saturated Output Power | +15 dBm Min. | 19.67 dBm | 20.02 dBm | 20.39 dBm |
| 6 | Harmonics at +5 dBm Input | -9 dBc Max. | -13.4 dBc | -13.3 dBc | -13.3 dBc |
| 7 | VSWR (In/Out) | 2.0:1 Max. | 1.4:1 In 1.9:1 Out | 1.4:1 In 1.9:1 Out | 1.4:1 In 1.8:1 Out |
| 8 | DC Power Supply | +12 VDC @ 450 mA Max. | +12V @ 283 mA | +12V @ 274 mA | +12V @ 293 mA |
| 9 | OIP3 | +23 dBm Typ. | +27 dBm | +23 dBm | +26.9 dBm |



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