Converters
SatCom Upconverter, C-Band
Model: MFC141

Features
- Ideal for Mil-Satcom Applications
- Very Low Phase Noise
- Good Amplitude & Phase Response
- High Output Compression and IP3
- Summary Alarm
- 20 dB Gain Control, RS485

Key Parameter | Requirement
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Bandwidth | .95 to 1.55 GHz
Input | 5.85 to 6.45 GHz
Gain | 35 dB
Manual Gain Control | Set gain to 35 dB
Programmable Gain Control | 20 dB min
Phase Noise (dBc/Hz) | 10 Hz -75 dbc
| 100 Hz - 95 dBc
| 1 K - 105 dBc
| 10 K - 107 dBc
| 100 K - 107 dBc
| 1 M - 143 dBc
Noise Figure | 15 dB

Key Parameter | Requirement
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IP3 – Two Tone Intermod | -60 dBC @ -35 dBm input
P1dB | 18 dBm
Band Flatness | +/- 0.25 dB
Any 60 MHz | +/- 0.5 dB
Any 125 MHz | +/- 1 dB
Phase Linearity | +/- 0.05 Radian
Any 60 MHz | +/- 0.15 Radian
Any 125 MHz | +/- 0.15 Radian
Spurious Output | -7.9 to 8.4 GHz
Signal Related | < -80 dBc
Signal Independent | < -80 dBm
IF Harmonics | < -63 dBc
Phase Errors | < 20 deg / .2 Sec

Typical Phase Noise

Drawing