

PN / UPN Series Internal Reference, Hi-Rel, COTS

PRODUCT FEATURES

- Commercial (PN Series) or high-rel (UPN Series)
- Fast switching available

GENERAL CHARACTERISTICS

- Frequency: 20 MHz - 10 GHz **New!**
- Bandwidth: Fixed, to > 50%
- Phase Noise (Fout=3 GHz): <-90 dBc/Hz @ 10 KHz
- SMT Package: 0.90" x 0.90" x 0.15"
(22.9 x 22.9 x 3.8)mm



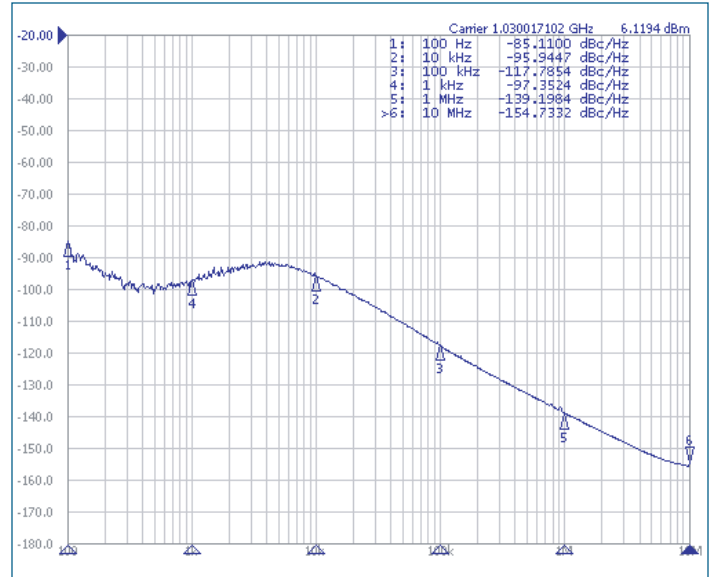
Custom Designs Available

Typical Performance for Select Units

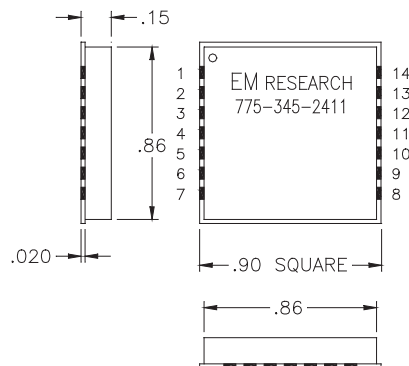
| *Model # | Freq. (MHz) | Step Size (KHz) | Power Out (dBm) | Harmonics (dBc) | Phase Noise (dBc/Hz) | | Spurs (dBc) | Voltage (Vdc) | Supply Current (mA) |
|-------------|-------------|-----------------|-----------------|-----------------|----------------------|--------|-------------|---------------|---------------------|
| | | | | | 10 KHz | 100KHz | | | |
| PN-100-XX | 100 | na | +7 | -15 | -105 | -120 | -60 | +5 | 50 |
| PN-380-XX | 380 | na | +6 | -15 | -110 | -120 | -65 | +3.3 | 45 |
| PN-1000-XX | 1000 | na | +10 | -15 | -100 | -120 | -60 | +5 | 50 |
| PN-1280-XX | 1280 | na | +3 | -15 | -100 | -120 | -60 | +5 | 45 |
| PN-1553-XX | 1553.5 | na | +13 | -20 | -95 | -115 | -60 | +5 | 95 |
| PN-3660-XX | 3660 | na | +10 | -15 | -85 | -105 | -60 | +5 | 85 |
| PN-4000-XX | 3800-4000 | 1000 | +7 | -20 | -90 | -110 | -60 | +5 | 45 |
| PN-4600-XX | 4600 | na | +3 | -20 | -75 | -95 | -60 | +5 | 45 |
| UPN-1010-XX | 990-1010 | 2500 | +7 | -10 | -102 | -123 | -65 | +12 | 40 |
| UPN-1150-XX | 1030-1150 | 1000 | +7 | -15 | -90 | -95 | -45 | +5 | 40 |
| UPN-3000-XX | 2000-3000 | 1250 | +7 | -12 | -82 | -102 | -65 | +12 | 65 |
| UPN-3800-XX | 3800 | na | +0 | -15 | -85 | -100 | -60 | +3.3 | 35 |
| UPN-4000-XX | 3000-4000 | 2500 | +7 | -12 | -80 | -100 | -65 | +12 | 55 |
| UPN-4050-XX | 2950-4050 | 10000 | +7 | -12 | -82 | -85 | -60 | +12 | 55 |
| UPN-5050-XX | 3950-5050 | 10000 | +7 | -12 | -80 | -80 | -65 | +12 | 55 |
| UPN-6000-XX | 6000 | na | +7 | -20 | -85 | -105 | -60 | +5 | 85 |

*Custom frequencies available. All specifications are typical unless otherwise specified and subject to change without notice.

Phase Noise



Package



PIN OUT

| PIN | OUT |
|-----|--------|
| 1 | REF IN |
| 2 | ENABLE |
| 3 | DATA |
| 4 | CLOCK |
| 5 | GND |
| 6 | GND |
| 7 | GND |
| 8 | VCC-A |
| 9 | GND |
| 10 | RF OUT |
| 11 | GND |
| 12 | VCC-D |
| 13 | GND |
| 14 | LOCK |

Note: All dimensions are in inches, unless otherwise specified

*Drawing not to scale