

# Frequency Synthesizer

KSN-EDR9428

## Typical Performance Data

| FREQ.<br>(MHz) | POWER OUTPUT<br>(dBm) |       |       | HARMONICS<br>(dBc) |        |        |        |        |        | VCO CURRENT<br>(mA) |       |       | PLL CURRENT<br>(mA) |       |       |
|----------------|-----------------------|-------|-------|--------------------|--------|--------|--------|--------|--------|---------------------|-------|-------|---------------------|-------|-------|
|                |                       |       |       | F2                 |        |        | F3     |        |        |                     |       |       |                     |       |       |
|                | -25°C                 | +25°C | +55°C | -25°C              | +25°C  | +55°C  | -25°C  | +25°C  | +55°C  | -25°C               | +25°C | +55°C | -25°C               | +25°C | +55°C |
| 2037.28        | 0.24                  | 0.41  | 0.18  | -31.72             | -33.15 | -33.86 | -31.90 | -35.36 | -35.64 | 42.74               | 44.07 | 44.85 | 12.00               | 13.66 | 14.92 |

| FREQ.<br>(MHz) | PHASE NOISE (dBc/Hz) |        |        |         |         |        |        |        |         |         |        |        |        |         |         |
|----------------|----------------------|--------|--------|---------|---------|--------|--------|--------|---------|---------|--------|--------|--------|---------|---------|
|                | @ OFFSETS            |        |        |         |         |        |        |        |         |         |        |        |        |         |         |
|                | -25°C                |        |        |         |         | +25°C  |        |        |         |         | +55°C  |        |        |         |         |
|                | 100Hz                | 1kHz   | 10kHz  | 100kHz  | 1MHz    | 100Hz  | 1kHz   | 10kHz  | 100kHz  | 1MHz    | 100Hz  | 1kHz   | 10kHz  | 100kHz  | 1MHz    |
| 2037.28        | -80.28               | -90.82 | -98.71 | -127.96 | -148.68 | -82.40 | -91.79 | -99.14 | -127.20 | -147.46 | -82.28 | -93.10 | -98.89 | -126.47 | -146.77 |

| REFERENCE &<br>COMPARISON<br>SPURIOUS ORDER | REFERENCE & COMPARISON SPURIOUS<br>@Fcarrier 2037.28MHz±<br>(n*Fcomparison)<br>(dBc) NOTE 1 |         |         |
|---------------------------------------------|---------------------------------------------------------------------------------------------|---------|---------|
|                                             | -25°C                                                                                       | +25°C   | +55°C   |
|                                             | n                                                                                           |         |         |
| -5                                          | -101.46                                                                                     | -109.75 | -117.02 |
| -4                                          | -100.33                                                                                     | -106.68 | -109.72 |
| -3                                          | -101.07                                                                                     | -102.66 | -106.74 |
| -2                                          | -101.78                                                                                     | -101.74 | -100.36 |
| -1                                          | -103.20                                                                                     | -98.55  | -104.53 |
| 0 note 2                                    | -                                                                                           | -       | -       |
| +1                                          | -102.74                                                                                     | -96.86  | -101.72 |
| +2                                          | -101.16                                                                                     | -102.58 | -103.59 |
| +3                                          | -103.30                                                                                     | -103.71 | -109.14 |
| +4                                          | -108.82                                                                                     | -104.84 | -111.54 |
| +5                                          | -112.87                                                                                     | -105.43 | -115.52 |

Note 1: Comparison frequency & Reference frequency 10.7 MHz  
Note 2: All spurs are referenced to carrier signal (n=0).

### Notes

- A. Performance and quality attributes and conditions not expressly stated in this specification document are intended to be excluded and do not form a part of this specification document.  
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