

# Frequency Synthesizer

ZSN-EDR10835

## Typical Performance Data

| FREQ.<br>(MHz) | POWER OUTPUT<br>(dBm) |       |       | HARMONICS<br>(dBc) |        |        |        |        |        | VCO CURRENT<br>(mA) |       |       | PLL CURRENT<br>(mA) |        |        |
|----------------|-----------------------|-------|-------|--------------------|--------|--------|--------|--------|--------|---------------------|-------|-------|---------------------|--------|--------|
|                |                       |       |       | F2                 |        |        | F3     |        |        |                     |       |       |                     |        |        |
|                | -10°C                 | +25°C | +70°C | -10°C              | +25°C  | +70°C  | -10°C  | +25°C  | +70°C  | -10°C               | +25°C | +70°C | -10°C               | +25°C  | +70°C  |
| 890            | 9.83                  | 9.88  | 9.85  | -58.22             | -59.03 | -57.51 | -57.77 | -54.68 | -57.64 | 23.45               | 0.00  | 25.21 | 151.52              | 153.64 | 156.06 |

| FREQ.<br>(MHz) | PHASE NOISE (dBc/Hz) |         |         |         |         |        |         |         |         |         |        |         |         |         |         |
|----------------|----------------------|---------|---------|---------|---------|--------|---------|---------|---------|---------|--------|---------|---------|---------|---------|
|                | @ OFFSETS            |         |         |         |         |        |         |         |         |         |        |         |         |         |         |
|                | -10°C                |         |         |         |         | +25°C  |         |         |         |         | +70°C  |         |         |         |         |
|                | 100Hz                | 1kHz    | 10kHz   | 100kHz  | 1MHz    | 100Hz  | 1kHz    | 10kHz   | 100kHz  | 1MHz    | 100Hz  | 1kHz    | 10kHz   | 100kHz  | 1MHz    |
| 890            | -99.29               | -107.19 | -104.97 | -125.36 | -154.68 | -99.35 | -108.14 | -104.67 | -126.04 | -155.11 | -97.98 | -108.37 | -104.12 | -125.69 | -154.04 |

| REFERENCE &<br>COMPARISON<br>SPURIOUS ORDER | REFERENCE & COMPARISON SPURIOUS<br>@Fcarrier 890MHz±<br>(n*Fcomparison)<br>(dBc) NOTE 1 |         |        |
|---------------------------------------------|-----------------------------------------------------------------------------------------|---------|--------|
|                                             | -10°C                                                                                   | +25°C   | +70°C  |
| n                                           |                                                                                         |         |        |
| -5                                          | -95.80                                                                                  | -89.36  | -82.51 |
| -4                                          | -98.42                                                                                  | -96.49  | -83.99 |
| -3                                          | -95.72                                                                                  | -101.77 | -84.35 |
| -2                                          | -87.64                                                                                  | -100.73 | -85.09 |
| -1                                          | -81.28                                                                                  | -89.7   | -82.8  |
| 0 note 2                                    | -                                                                                       | -       | -      |
| +1                                          | -79.69                                                                                  | -81.02  | -82.79 |
| +2                                          | -82.06                                                                                  | -83.5   | -87.37 |
| +3                                          | -82.29                                                                                  | -83.38  | -91.12 |
| +4                                          | -81.59                                                                                  | -81.79  | -89.04 |
| +5                                          | -82.17                                                                                  | -80.72  | -85.7  |

Note 1: Comparison frequency & Reference frequency 10 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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