Frequency Synthesizer

S510M804MB

Features

A frequency synthesizer equipped with a high-stability and low-noise OCXO, best suited for base stations requiring high-purity signals.

- Low-phase noise characteristic: -53 dBc max. as the integration value from 10 Hz to 1 MHz
- Wide frequency range: 510.292857 to 804.292857 MHz
- Highly stable signal source: ±0.5 × 10⁻⁶
- Frequency setting is possible with a rotary switch (6 MHz step).
- · A product with characteristics best suited for digital terrestrial broadcasting (ISDB-T).

Standard Specifications

| Item Model | S510M804MB | | | | | |
|--|--|--|--|--|--|--|
| Frequency Range | 510.292857 to 804.292857 MHz (frequency variable width: 294 MHz) | | | | | |
| Frequency setting resolution | 6 MHz step (changeable with a rotary switch) | | | | | |
| Frequency stability | Max. ±0.5 × 10 ⁻⁶ | | | | | |
| Aging characteristic | Max. ±0.5 × 10 ⁻⁶ /year (based on the frequency over 30 days) | | | | | |
| Phase noise characteristic | Max. –53 dBc (integration value of 10 Hz to 1 MHz) | | | | | |
| Output power | 0 dBm ±3 dB | | | | | |
| Spurious characteristic | Harmonic: Max. –20 dBc Non-harmonic: Max. –70 dBc | | | | | |
| External signal input frequency | 10 MHz | | | | | |
| Power supply voltage (consumption current) | +12 V (Max. 0.45 A) | | | | | |
| Operating temperature range (°C) | -20 to +60 | | | | | |
| Dimensions | 90 mm (width) x 19.7 mm (height) x 110 mm (depth) | | | | | |
| RF interface | SMA-F connector | | | | | |
| Control/power supply interface | DF11-12DP-2DS (manufactured by HIROSE ELECTRIC CO., LTD.) | | | | | |

The above specifications are standard for this NDK product. Custom-made specifications such as frequency stability and dimensions are also available. Please contact NDK sales with your enquiries.





Characteristics



Pin configuration (DF11-12DP-2DS)

IC

IC +12 V

GND

PAD #1 #2

#3

#4

#5 #6

#7

#8 #9

#10

#11 #12

| Connection |
|------------------|
| GND |
| IC |
| PLL RESET INPUT |
| REF ALARM OUTPUT |
| IC |
| IC |
| |

UNLOCK ALARM OUTPUT

RF LEVEL ALARM OUTPUT

* IC : Inter-connection

| fs | 100907 | _S510M804MB | e |
|----|--------|-------------|---|
| _ | | | _ |





RoHS Compliant

Directive 2011/65/EU