Frequency Synthesizer

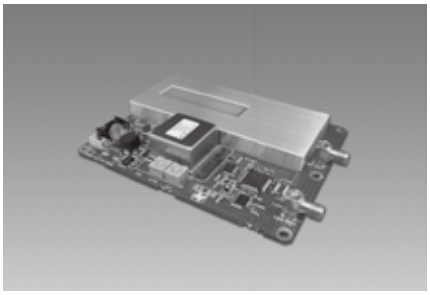
Crystal Bridge to the Future

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).



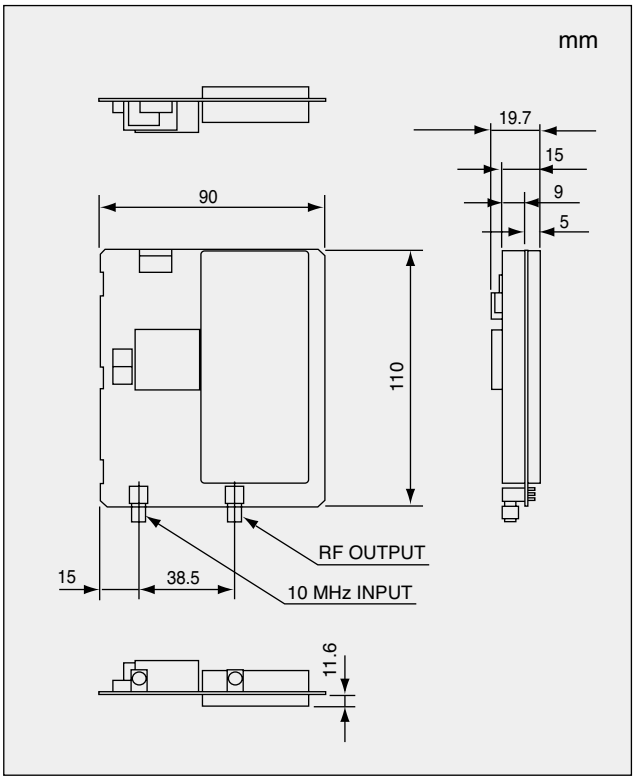
RoHS Compliant
Directive 2011/65/EU

■ 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.)

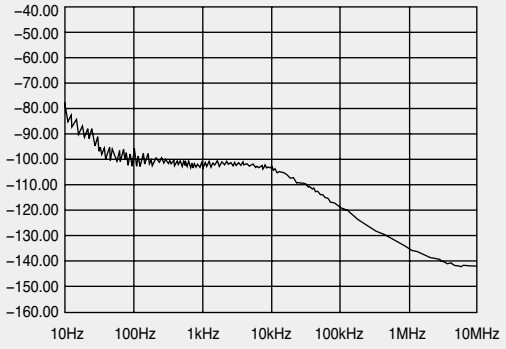
The above specifications are standard for this NDK product. Custom-made specifications such as frequency stability and dimensions are also available. Please contact NDK sales with your enquiries.

■ Dimensions



■ Characteristics

Phase noise characteristic when output at 804.292857 MHz (representative value)



Pin configuration (DF11-12DP-2DS)

* IC : Inter-connection

PAD	Connection
#1	GND
#2	IC
#3	PLL RESET INPUT
#4	REF ALARM OUTPUT
#5	IC
#6	IC
#7	IC
#8	UNLOCK ALARM OUTPUT
#9	RF LEVEL ALARM OUTPUT
#10	IC
#11	+12 V
#12	GND