Frequency Synthesizer

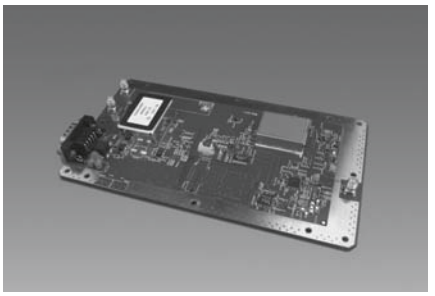
Crystal Bridge to the Future

S470M890MA

■ Features

A frequency synthesizer equipped with a high-stability OCXO: best suited for base stations requiring excellent aging characteristics.

- Low-phase noise characteristic: –95 dBc/Hz at 100 Hz
- Wide frequency range: 470 to 890 MHz
- Highly stable signal source: ±0.1 ppm max.
- Fine frequency setting resolution: 1 Hz step
- A product with characteristics best suited for digital terrestrial broadcasting (DVB-T, ATSC).



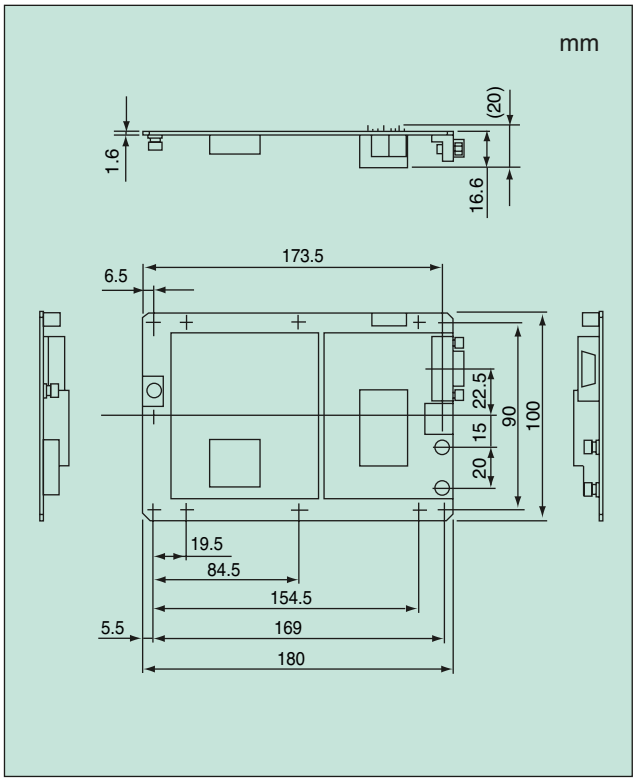
RoHS Compliant
Directive 2002/95/EC

■ Standard Specifications

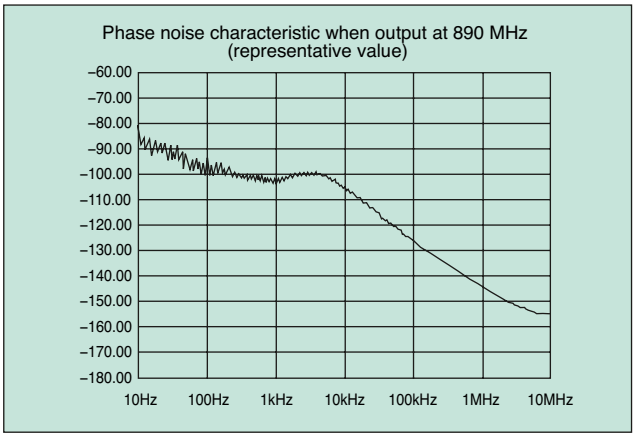
Item \ Model	S470M890MA
Frequency Range	470 to 890 MHz (frequency variable width: 420 MHz)
Frequency setting resolution	1 Hz step
Frequency stability	±0.1 × 10^{-6}
Aging characteristic	±0.1 × 10^{-6} /year (based on the frequency over 30 days)
Phase noise characteristic	–95 dBc/Hz @100 Hz
Output power	0 dBm ± 1 dB
Spurious characteristic	Harmonic: –20 dBc max. Non-harmonic: –70 dBc max.
External signal input frequency	10 MHz
Power supply voltage (consumption current)	+12 VDC (0.5 A max.)
Operating temperature range	–20 to +60 °C
Dimensions	100 mm (width) x 20 mm (height) x 180 mm (depth)
RF interface	SMA-F connector
Control/power supply interface	DSUB 9-pin connector

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



Pin configuration (DELC-J9PAF)

PAD	Connection	
#1	Alarm 1 (RF unlock)	Output
#2	SCLK (serial clock)	Input
#3	SDI (serial data)	Input
#4	SCS (serial chip select)	Input
#5	GND	
#6	Alarm 2 (external 10 MHz PLL unlock)	Output
#7	Alarm 3 (OCXO open)	Output
#8	GND	
#9	+12 V (power supply)	Input