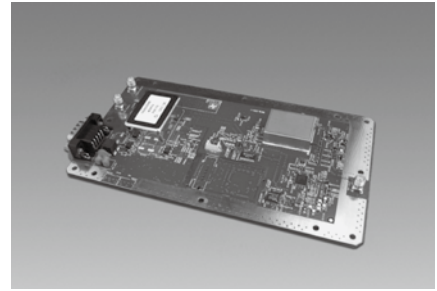


## S470M890MA

### ■ 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:  $\pm 0.1 \times 10^{-6}$  max.
- Fine frequency setting resolution: 1 Hz step
- A product with characteristics best suited for digital terrestrial broadcasting (DVB-T, ATSC).



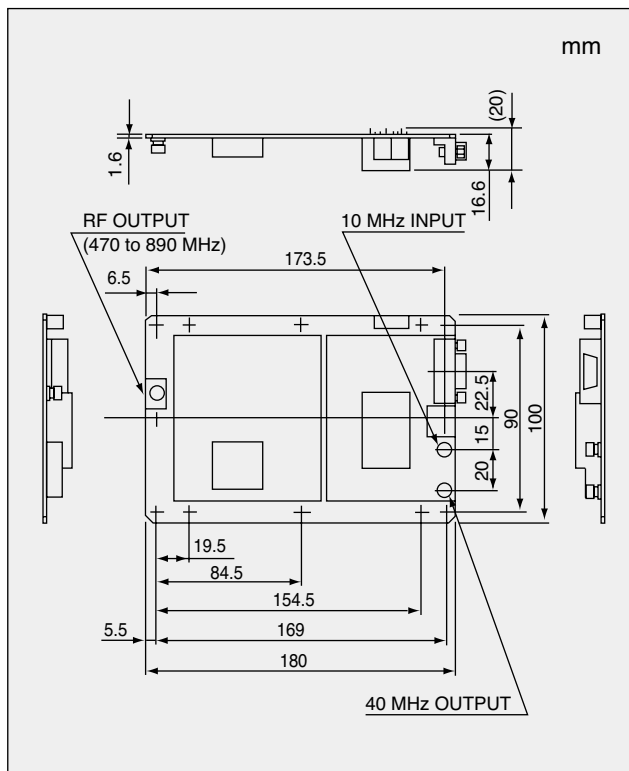
**RoHS Compliant**  
Directive 2011/65/EU

### ■ Standard Specifications

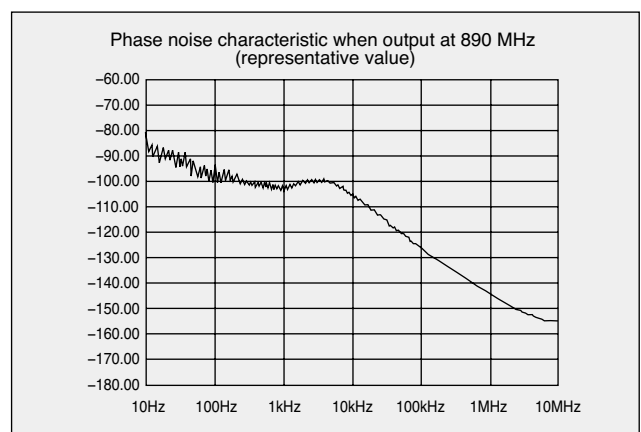
Item	Model	S470M890MA
Frequency Range		470 to 890 MHz (frequency variable width: 420 MHz)
Frequency setting resolution		1 Hz step
Frequency stability		Max. $\pm 0.1 \times 10^{-6}$
Aging characteristic		Max. $\pm 0.1 \times 10^{-6}$ /year (based on the frequency over 30 days)
Phase noise characteristic		Max. $-95$ dBc/Hz @100 Hz
Output power		0 dBm $\pm$ 1 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. 0.5 A)
Operating temperature range (°C)		$-20$ to $+60$
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 (DELG-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	Input