Frequency Synthesizer



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 × 10⁻⁶ max.
- Fine frequency setting resolution: 1 Hz step
- A product with characteristics best suited for digital terrestrial broadcasting (DVB-T, ATSC).



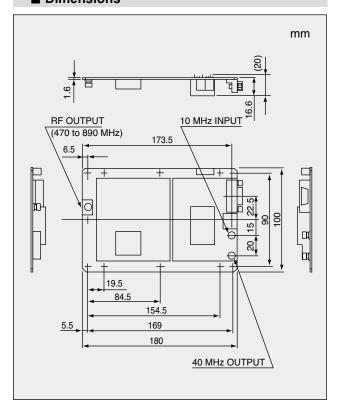


■ Standard Specifications

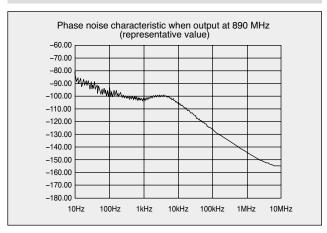
Item Model	S470M890MA	
Frequency Range	470 to 890 MHz (frequency variable width: 420 MHz)	
Frequency setting resolution	1 Hz step	
Frequency stability	Max. ±0.1 × 10 ⁻⁶	
Aging characteristic	Max. ±0.1 × 10 ⁻⁶ /year (based on the frequency over 30 days)	
Phase noise characteristic	Max95 dBc/Hz @100 Hz	
Output power	0 dBm ± 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 (DELC-J9PAF)

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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	