

# Frequency Synthesizer

## S010G010GA

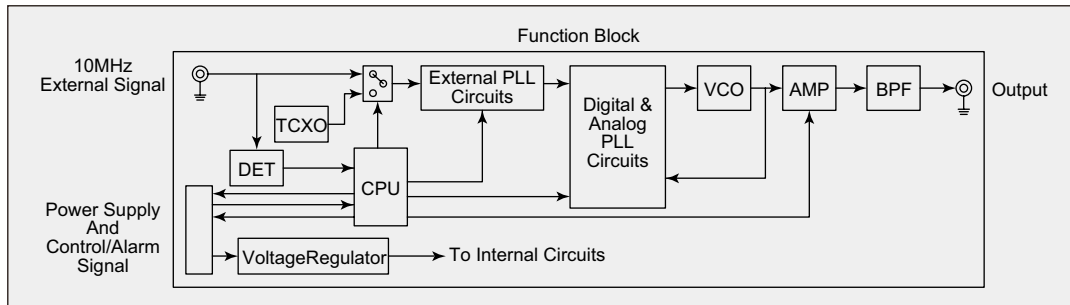
### ■ Main Application

- Local Oscillator of Microwave Equipment
- Reference Signal of Radar System or Measurement Equipment

### ■ Features

- Best Suited for Local Oscillator with Low Phase Noise and Low Spurious
- Built-in PLL Circuit for Synchronizing to 10MHz External Signal
- TCXO is Active in case of No External Reference Signal
- Corresponding to the Frequency of 4GHz up to 10GHz

**RoHS Compliant**  
Directive 2011/65/EU  
Directive (EU) 2015/863



### ■ Specifications

Item	Model	S010G010GA		
Output Frequency (GHz)		A specified frequency from 4GHz to 10GHz		
Standard Frequency (GHz)		4, 5, 6, 7, 8, 9, 10 (less than relative bandwidth of 5%) *1		
Frequency Resolution (MHz)		1		
Frequency Setting		3-wire Serial Interface		
Frequency Stability		Depends on External Signal		
		(Internal TCXO Stability) Max. $\pm 3 \times 10^{-6}$		
Output Level (dBm)		10 $\pm$ 2dB		
Spurious Harmonics (dBc)		Max. -30		
Spurious Non-harmonics (dBc)		Max. -60		
Phase Noise (dBc/Hz)		at 4GHz	at 7GHz	at 10GHz
	1kHz	Typ. -80	Typ. -75	Typ. -72
	10kHz	Typ. -102	Typ. -100	Typ. -97
	100kHz	Typ. -106	Typ. -101	Typ. -94
Interface	Output	SMA-F		
	External Reference Input	SMB Jack		
	Power Supply	DF11-12DP-2DS (52) (manufactured by Hirose Electric Co., LTD.)		
Power Supply Voltage (V)		DC+12V $\pm$ 5%		
Current Consumption (A)		Max. 0.65		
Operating Temperature Range (°C)		-10 to +60		
Dimensions (mm)		60 (Width) $\times$ 110 (Length) $\times$ 22 (Height) (Except for protruding parts)		

Specifications described in this brochure are subject to change without notice for improvement.

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

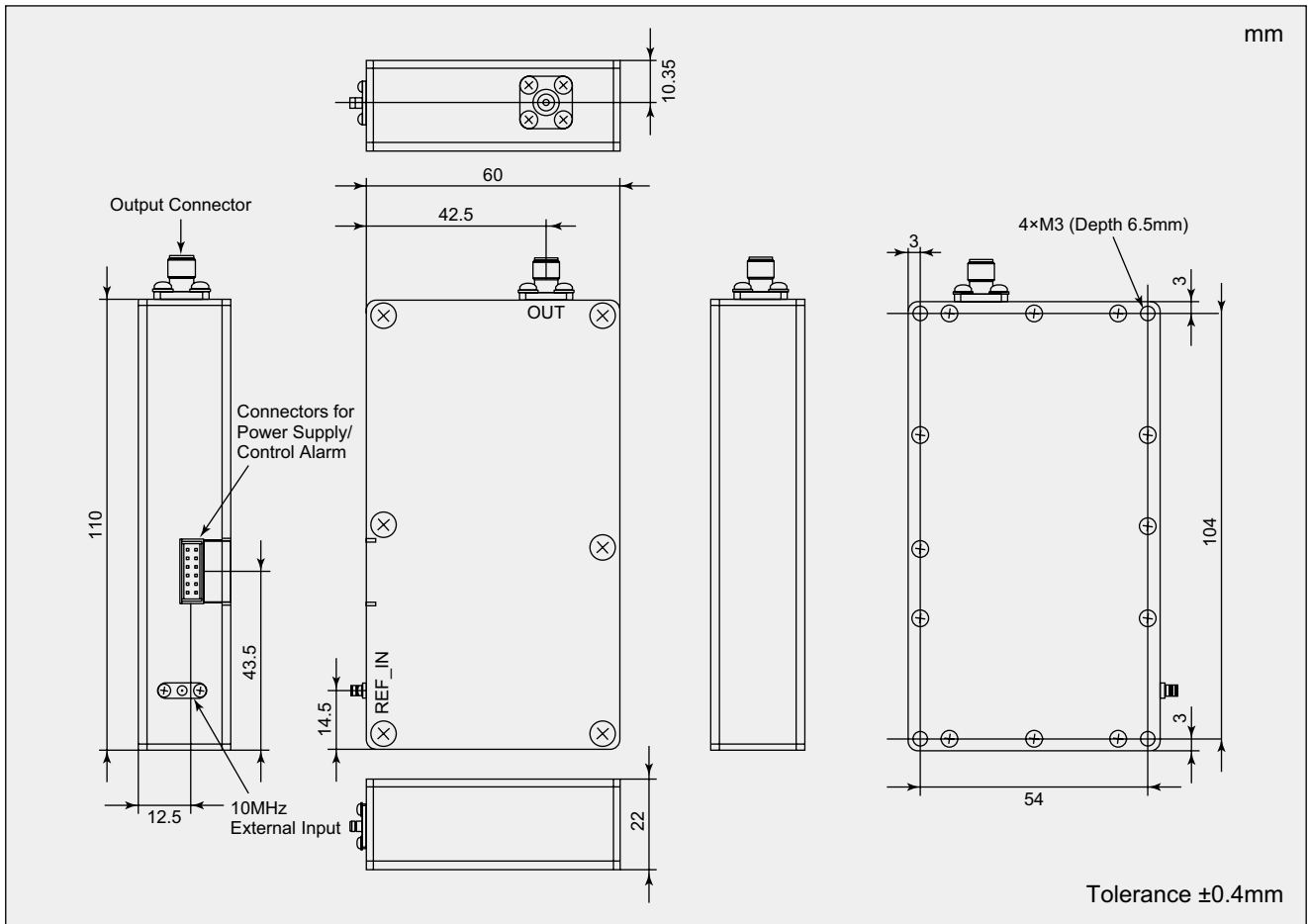
\*1 Model code depends on the output frequency.

Output Frequency (GHz)	Model
4 to 4.1	S4R0G4R1GA
5 to 5.1	S5R0G5R1GA
6 to 6.1	S6R0G6R1GA
7 to 7.2	S7R0G7R2GA
8 to 8.2	S8R0G8R2GA
9 to 9.2	S9R0G9R2GA
10 to 10.4	S010G010GA

# Frequency Synthesizer

## S010G010GA

### ■ Dimensions



### ■ Characteristics

