

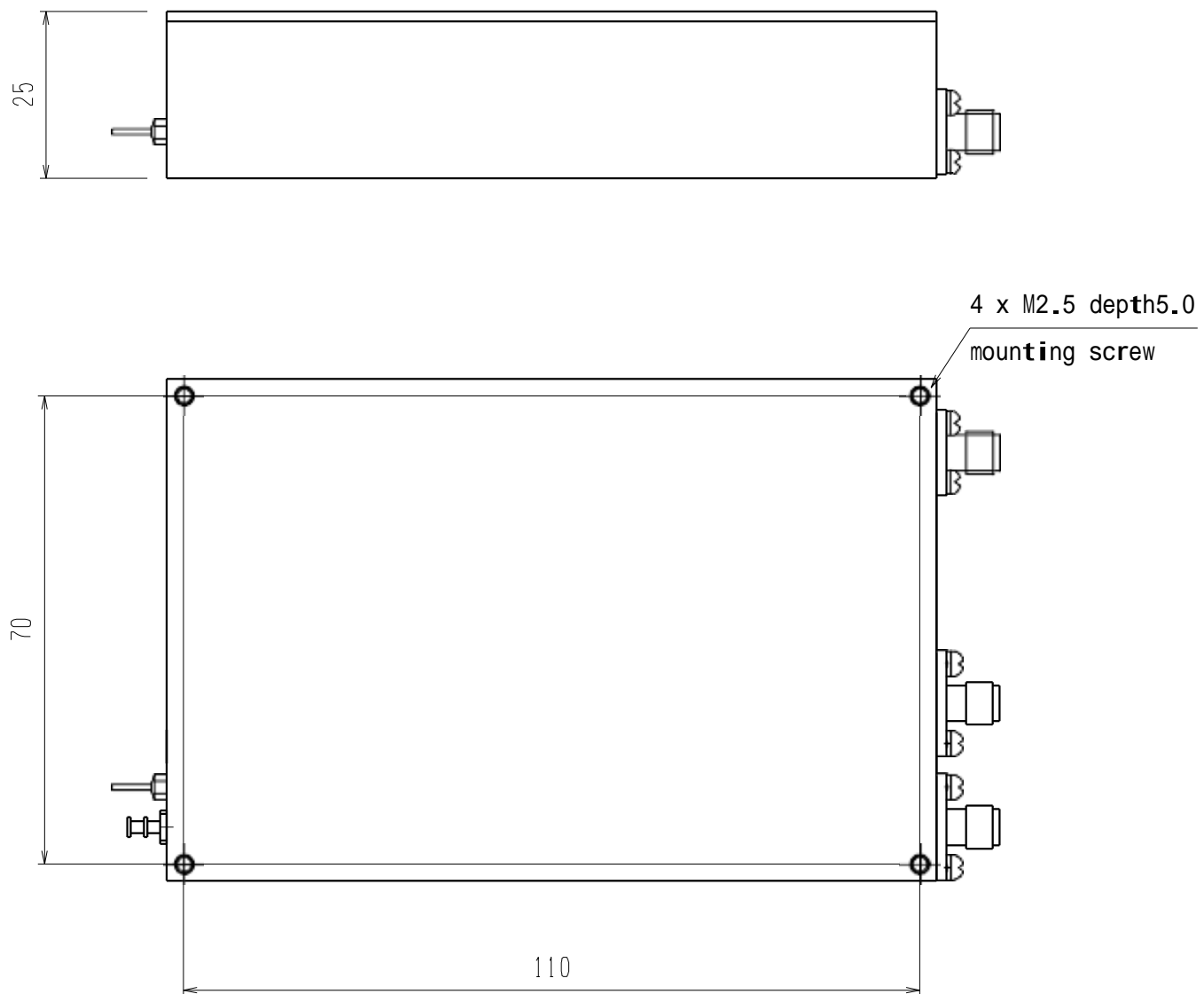
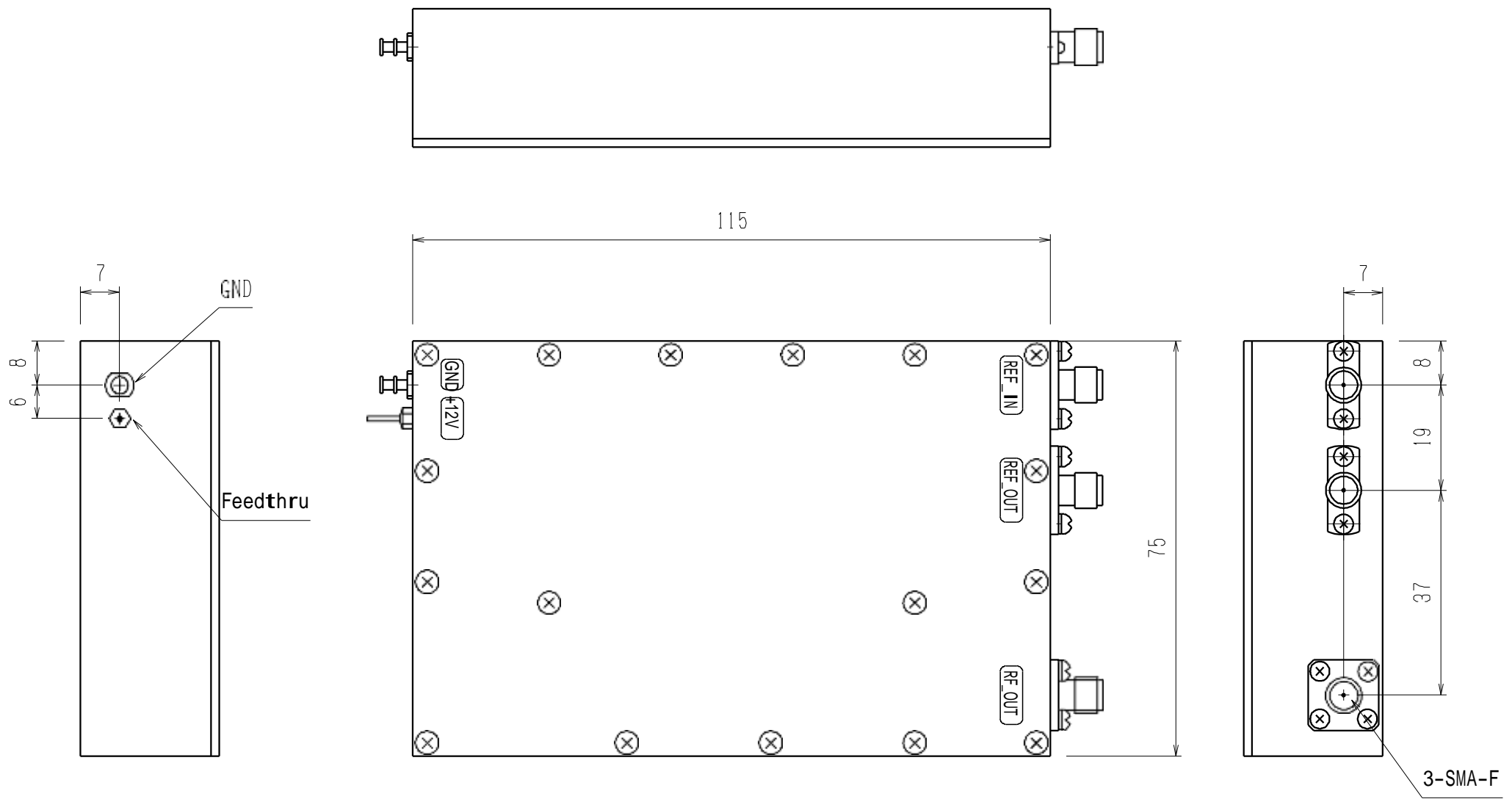


**Specification for 8.000GHz Band Signal Sources**

**Model : MX009**

Item	Specification	Note
1.0 Electrical Performance		
1.1 RF Output Signal		
** 1) Frequency Range	8.000 GHz	RL=50 ohms
2) RF Output Power	+10dBm Min.	
3) Phase Noise Level		
Offset 10 Hz	≤ -64dBc/Hz	
100 Hz	≤ -94dBc/Hz	
** 1 KHz	≤ -119dBc/Hz	
10 KHz	≤ -137dBc/Hz	
100 KHz	≤ -139dBc/Hz	
1 MHz	≤ -139dBc/Hz	
4) Spurious		
Non-Harmonics	≤ -65 dBc	
Harmonics	≤ -35 dBc	
1.2 External Reference		
1) Input Frequency	10.000 MHz Sine Wave	Input Impedance=50 ohms
2) Input Level	0dBm typical	
3) Phase Noise Level	C/N ≤ -150dBc/Hz @100Hz	
4) Lock Range	≥ ±1ppm	
1.3 Reference Output		
1) Output Frequency	10.000MHz Sine Wave	RL=50 ohms
2) Output Level	+6dBm ± 2dB,	
3) Phase Noise Level	C/N ≥ -150dB/Hz @100Hz	
*1 4) Frequency Stability	Same as Ext. Ref. IN	
1.4 DC Power	+12V ± 5% 600mA Max	
2.0 Temp. Range		
2.1 Operating	-20~+70deg. C	
2.2 Storage	-40~+70deg. C	
3.0 Package		
** 3.1 Package Size	115 (L) × 75 (W) × 25 (T) mm Tolerance : ±0.1mm	See attached
3.2 Connector	RF_OUT : SMA (F) REF_IN, REF_OUT : SMA (F) DC Power : Feedthrough	

\* 1 Frequency Stability, 1X10<sup>-7</sup> will be kept by Internal reference when No external Reference In.



UNIT : mm

RoHS

8.000GHz Signal Source  
MX009  
NEL Frequency Controls Inc.