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■ Universal Ku-band 2LO PLL LNB (Switchable Local) - Int. Ref. (±50 ppm) -

MODEL No. **NJR2841L/42L/43L** series

< Features >

* Switchable Local

- Local Frequency: 9.75 / 10.6 GHz

* Full Ku-band Coverage

- RF Frequency: 10.70 – 12.75 GHz
  (Low Band) 10.70 – 11.70 GHz
  (High Band) 11.70 – 12.75 GHz

* Local Switching Line-up

Local Frequency Selected by
- Mechanical Switch: NJR2841 series
- 22kHz Tone On/Off: NJR2842 series
- Input Voltage (High/Low): NJR2843 series

* Small Size & Light Weight

- Weight: 240 g (N-type Connector Model)
- Weight: 210 g (F-type Connector Model)

* RoHS Compliance

< Line-Up >

Model No.	RF Frequency	Local Frequency	IF Connector	Local Stability	Local Frequency Slected by	IF Connector
NJR2841L	10.70 to 11.70 GHz / 11.70 to 12.75 GHz	9.75 GHz / 10.6 GHz	950 to 1,950 MHz / 1,100 to 2,150 MHz	+/- 50 ppm	Mechanical Switch	F-type
NJR2841LN						N-type
NJR2842L					22kHz Tone On/Off	F-type
NJR2842LN						N-type
NJR2843L					Input Voltage (High/Low)	F-type
NJR2843LN						N-type

Model Numbering

N J R 2 8 4 1 L N

IF Connector Line-up:
N: N-type (50 ohms), Female Connector
Non Suffix: F-type (75 ohms), Female Connector

Local Stability Line-up:
L: Internal Reference (Local Stability: +/- 50 ppm)
H: Internal Reference (Local Stability: +/- 10 ppm)
S: Internal Reference (Local Stability: +/- 3 ppm)
E: External Reference

Local Selection Line-up:
1: Outside Mechanical Switch
2: 22kHz Tone On/Off
3: Input Voltage (High/Low)

Product Series Number

Note: The contents of this sheet are subject to change without notice.

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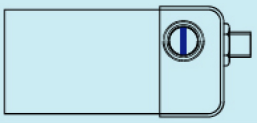
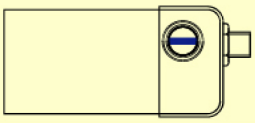
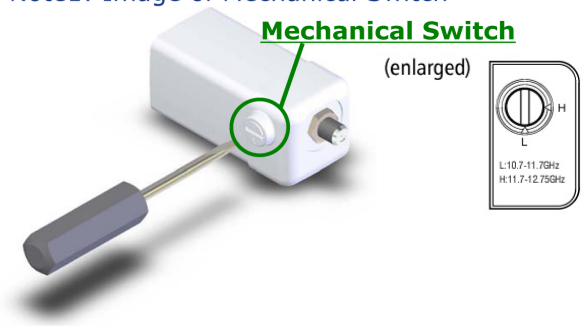
< Specifications >

Item	Specifications
Input Interface	Waveguide, WR75 (with Groove)
Output Interface	N-type, female (50 ohm) [Model No.: NJR2841LN/42LN/43LN]
	F-type, female (75 ohm) [Model No.: NJR2841L/42L/43L]
Noise Figure at +25 C	0.8 dB typ., 1.0 dB max.
Linear Gain (Ta.: +25 C)	48 dB min., 62 dB max.
L.O. Phase Noise (SSB)	-50 dBc/Hz typ. @ 100 Hz, -70 dBc/Hz typ. @ 1 kHz
	-75 dBc/Hz typ. @ 10 kHz, -85 dBc/Hz typ. @ 100 kHz
	Depends on phase noise of external reference
L.O. Leakage Level	-40 dBm max. at the IF Output Connector
	-60 dBm max. at the RF Input Flange
Spurious	a) -120 dBm max. at input, fixed frequency spur, unrelated to test CW signal (Measured at specified IF band).
	b) -40 dBc typ. with test CW signal -10 dBm IF output (Measured at specified IF band).
Input V.S.W.R.	2.5 : 1 typ.
Output V.S.W.R.	2.3 : 1 max.
Power Requirement	+24 VDC (+10 to +24 VDC)
Current Drain	200 mA max.
Temperature Range (ambient)	-40 to +60 C (operating), -40 to +80 C (storage)
Dimension & Housing (without Interface Connectors / Switch)	83.4 mm (L) x 42 mm (W) x 42 mm (H) [Model No.: NJR2841L/41LN] [3.28" (L) x 1.65" (W) x 1.65" (H)]
	82.2 mm (L) x 40 mm (W) x 40 mm (H) [Model No.: NJR2842L/42LN/43L/43LN] [3.24" (L) x 1.57" (W) x 1.57" (H)]
Weight	240 g [0.53 lbs] [Model No.: NJR2841LN/42LN/43LN]
	210 g [0.46 lbs] [Model No.: NJR2841L/42L/43L]

Specifications of Local Switch

	RF Frequency	
	Low Band (10.7 to 11.7 GHz)	High Band (11.7 to 12.75 GHz)
Mechanical Switch	Initial Set 	
22kHz Tone On/Off	Tone Level: 0 to 0.2 Vp-p	Tone Level: 0.4 to 0.8 Vp-p
Input Voltage High/Low	Voltage: +10 to +14 VDC	Voltage: +15.5 to +24 VDC

Note1: Image of Mechanical Switch



Note2: Specification of 22 kHz Tone

Input Port: IF Output Connector
(Combine DC Supply with IF Signal)
Wave Form: Square-wave
Frequency: 22 +/- 4 kHz
Duty Cycle: 30 to 70 %

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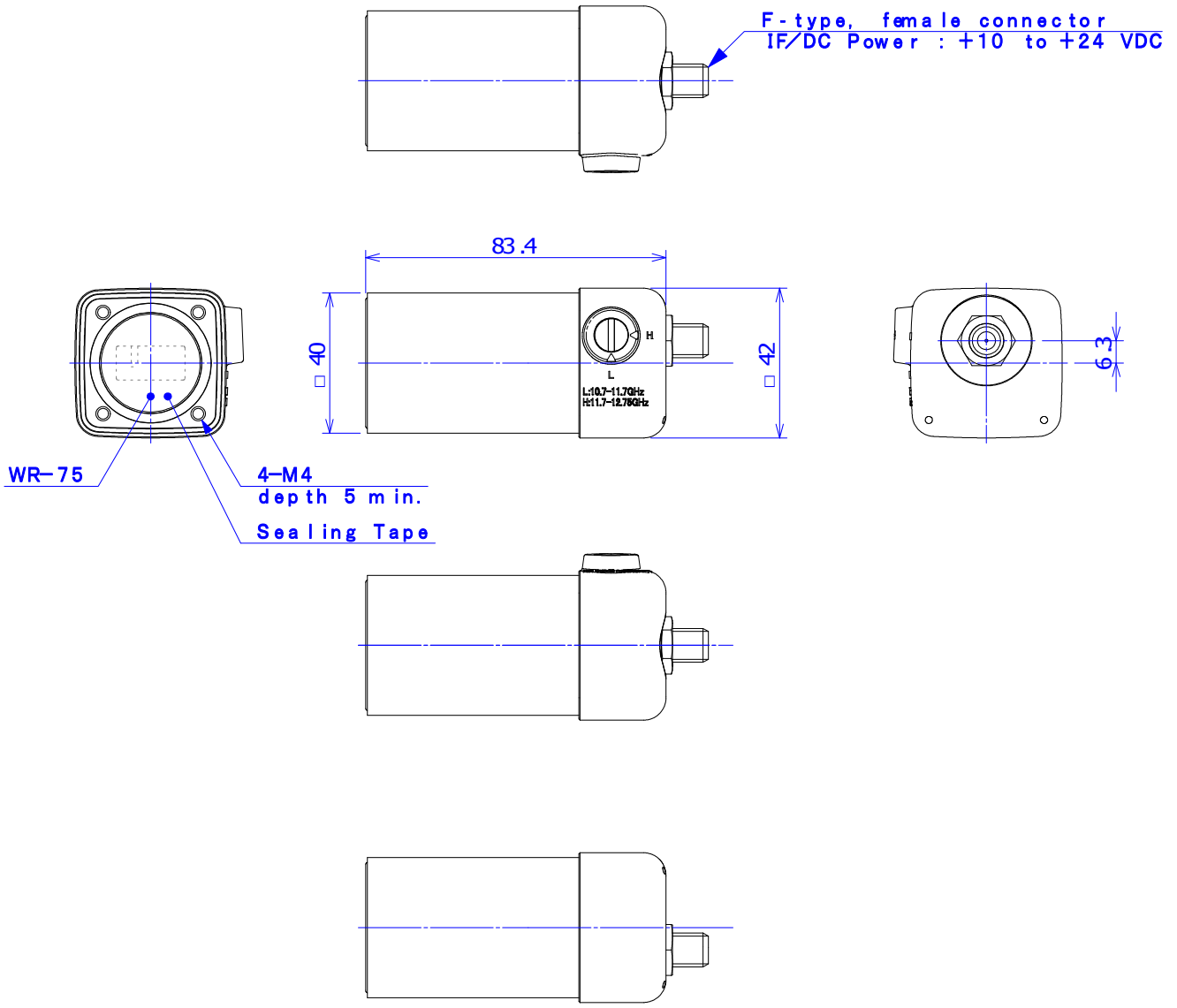
< Outline Drawing >

NJR2841L



Unit: mm

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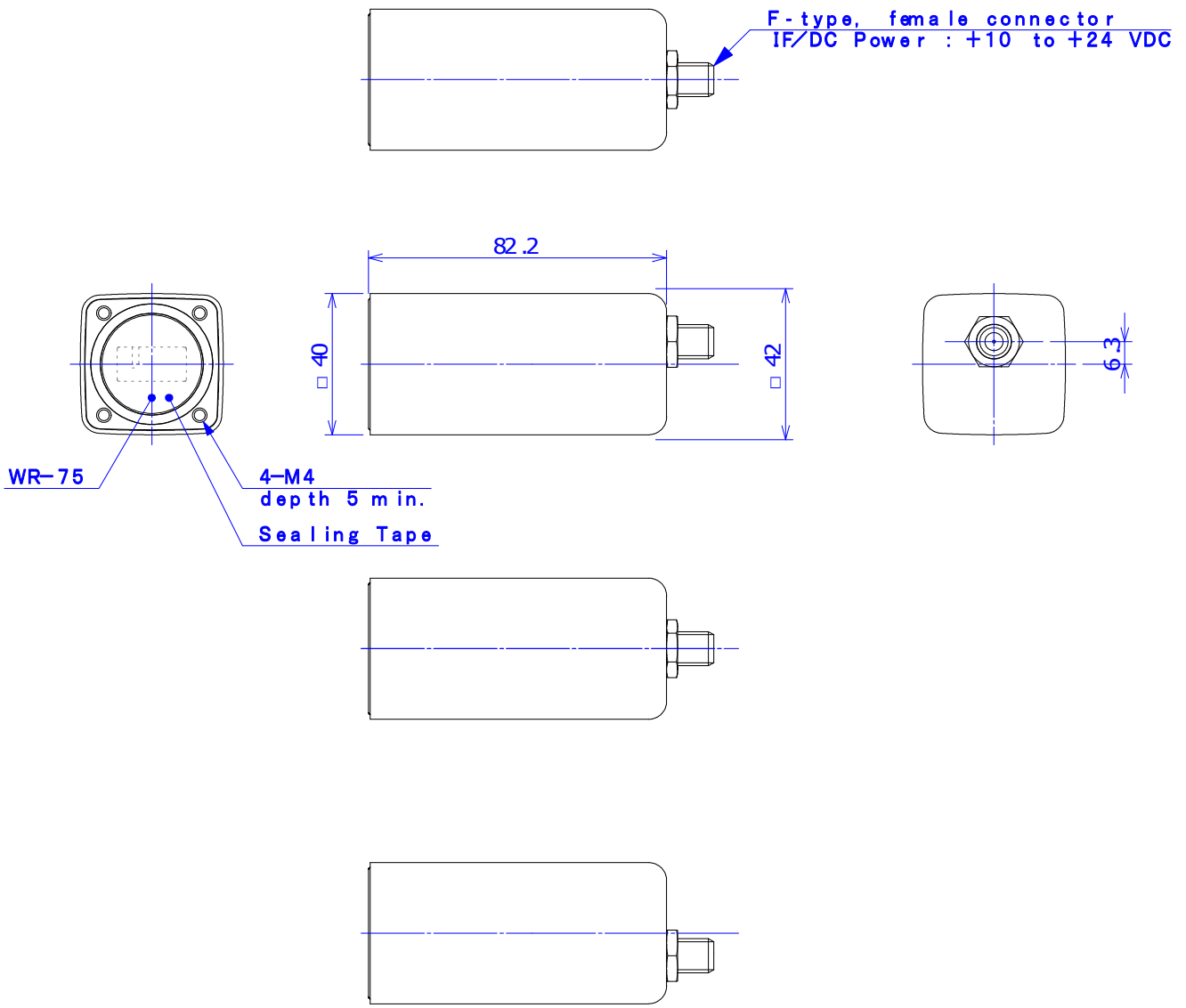
< Outline Drawing >

NJR2842L/43L



Unit: mm

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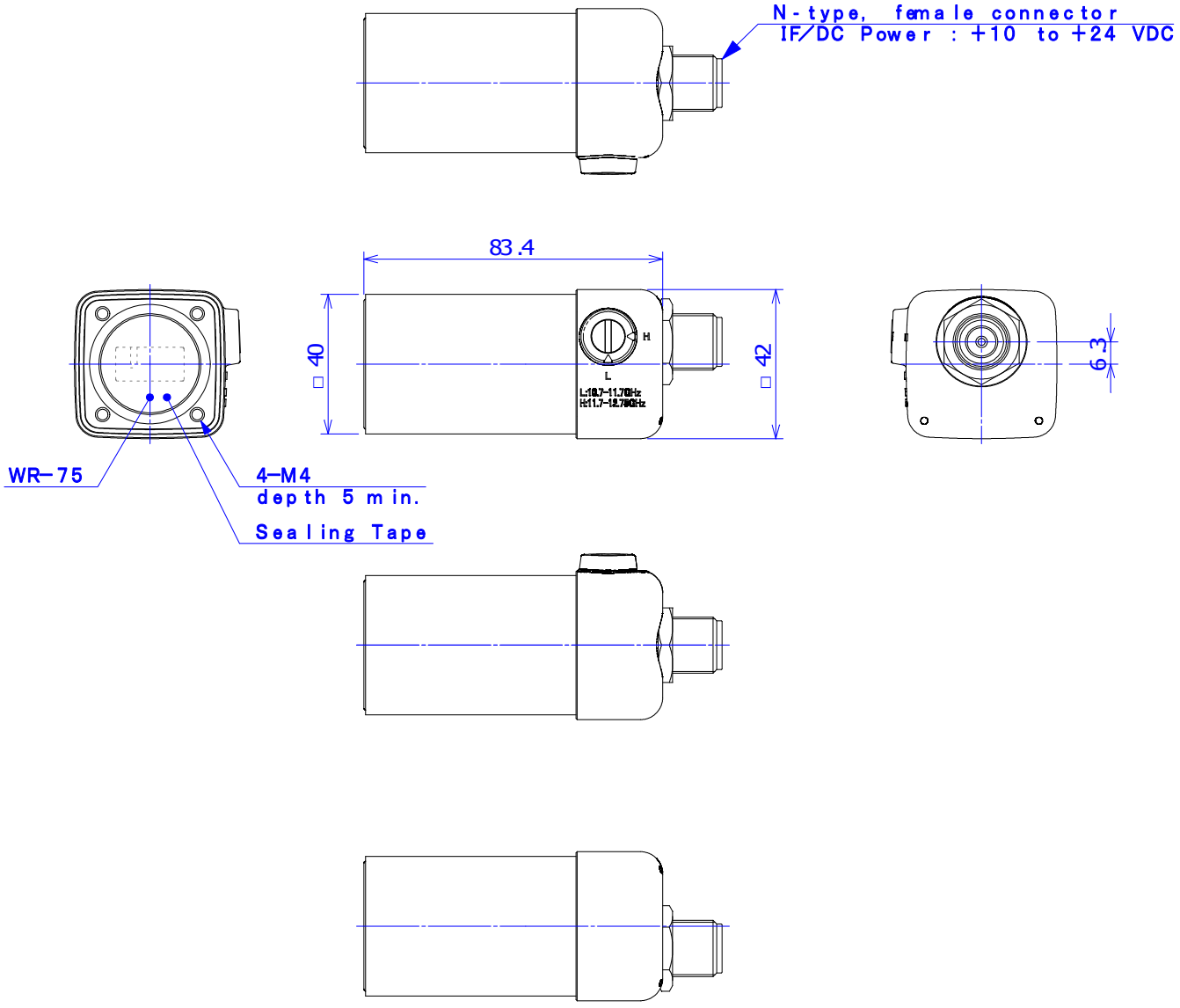
< Outline Drawing >

NJR2841LN



Unit: mm

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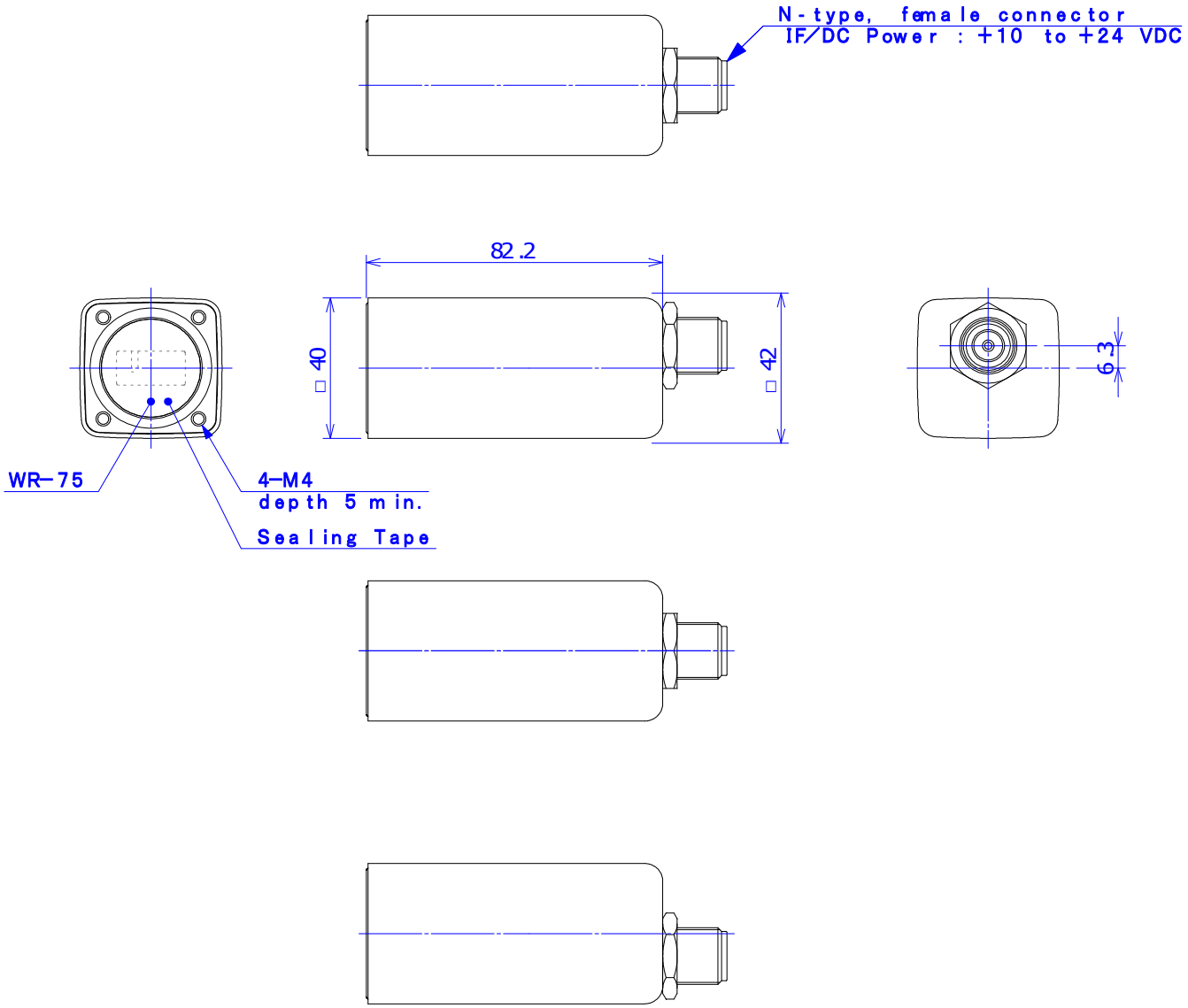
< Outline Drawing >

NJR2842LN/43LN



Unit: mm

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