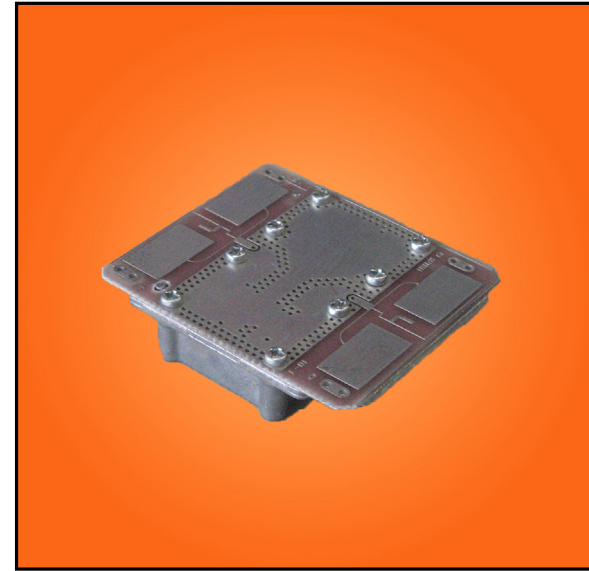


# X-band Doppler Sensing Devices

MODEL No. **NJR4176/77/78/81/82** series

## < Features >

- \* Including Patch Antenna
- \* **DRO: Dielectric Resonator Oscillator**
- \* **Low DC Current Drain**  
 ·30 mA @ +5 VDC
- \* **Small Size**  
 ·46.5 mm x 40 mm x 12 mm
- \* **RoHS Compliance**



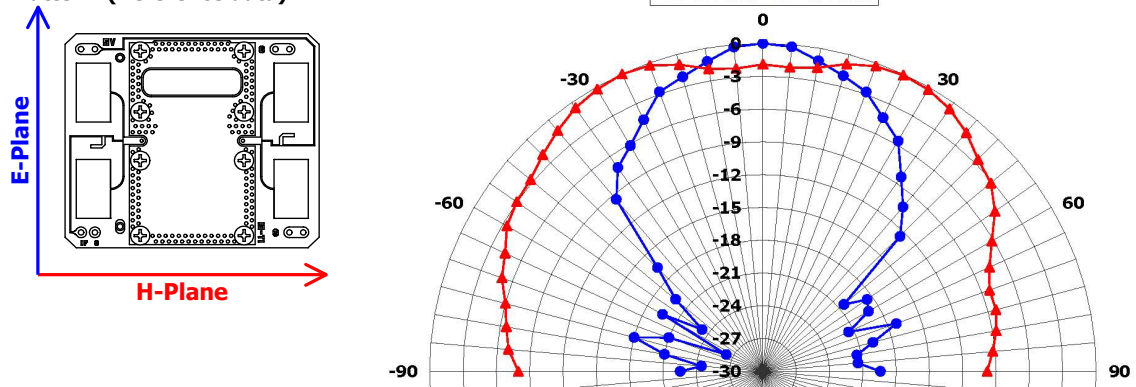
## < Line-Up >

Model No.	Center Frequency	Output Power	Operating Voltage	Operation	Region
NJR4176	9.900 GHz	20 mW E.I.R.P.	+5 VDC	CW / Pulse	France / Italy
NJR4177	10.687 GHz				U.K.
NJR4178	10.525 GHz				U.S. / Canada / Belgium / Netherlands
NJR4181	9.350 GHz				Germany
NJR4182	10.587 GHz				U.K. / France

## < Specifications >

Item	Specifications	
Condition	Ta = +25 C, Vin = +5 VDC	
Operating Voltage	+5.0 ± 0.2 VDC	
Operating Current	30 mA typ.	
Output Power	20 mW (13 dBm) E.I.R.P. typ.	
Frequency Stability	±5 MHz max. (Ta: -30 to +55 C)	
Return Loss Sensitivity	-90 dBc typ.	
Second Harmonic Emission	1.0 μW (-30 dBm) max.	
Antenna Beamwidth (-3 dB)	E-Plane	36 degree nom.
	H-Plane	72 degree nom.
RF Interface	Patch Antenna	
Temperature Range	-30 to +55 C (operating), -40 to +80 C (storage)	
Dimension	46.5 mm x 40 mm x 12 mm	
Regulation for compliance	ETS 300 440	

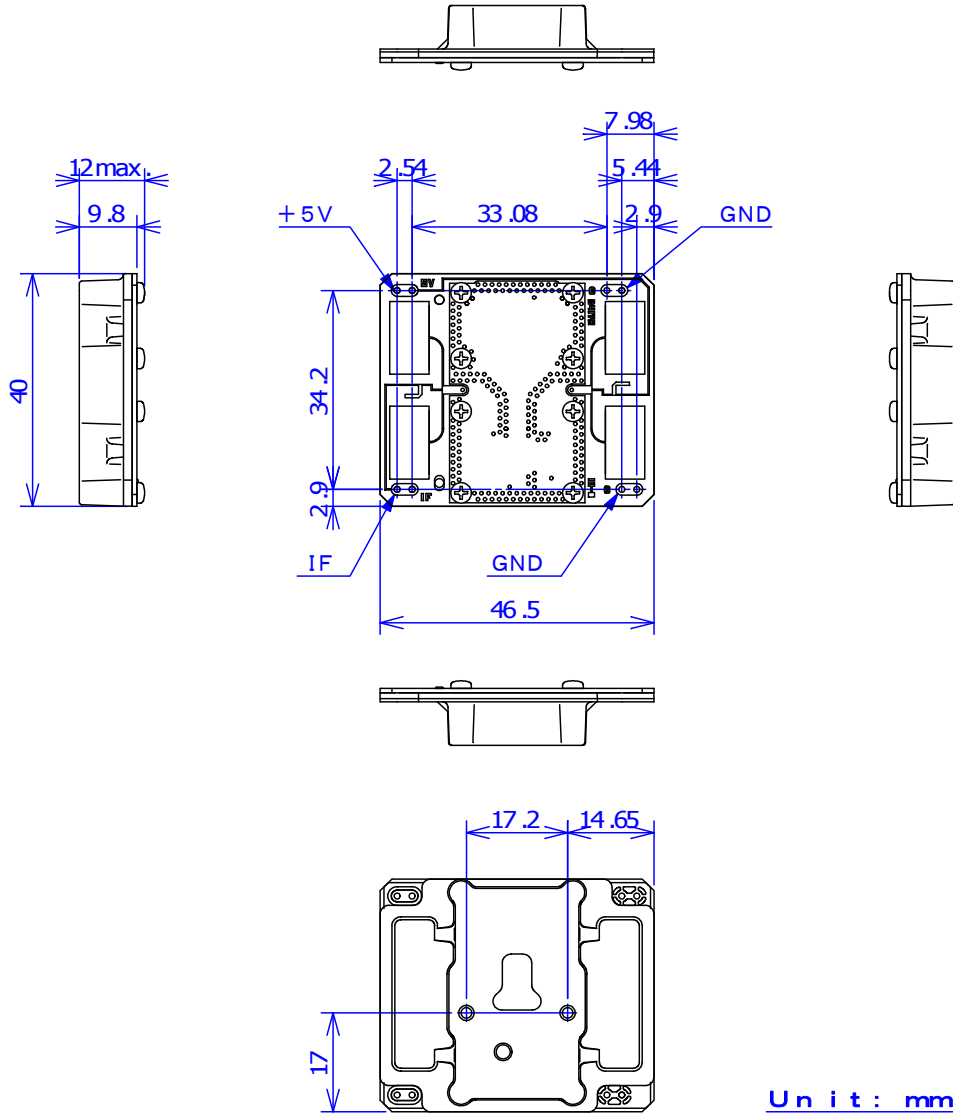
Radiation Pattern (Reference data)



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< Outline Drawing >



Unit: mm