

# Cavity Resonators



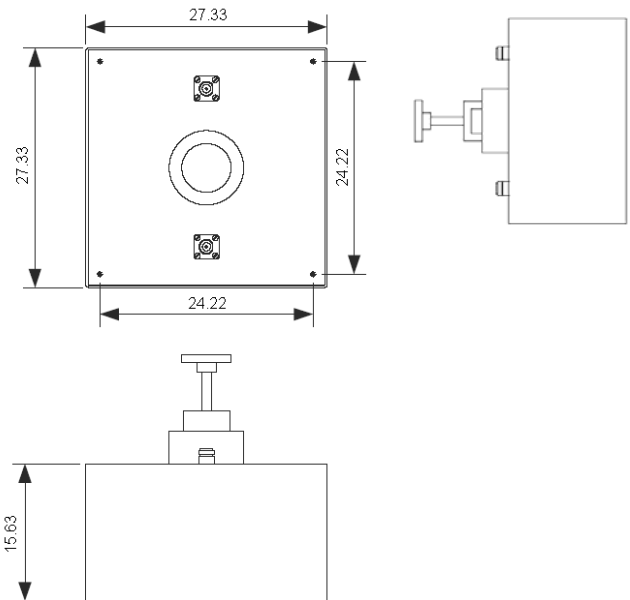
DrawCom's cavity resonator, together with its associated cable harness, forms an element of low-loss bandpass filtering in a transmitter multicoupling system and is connected between each transmitter output and the common feed to the antenna. We offer a wide range of cavities that are ideally suited for the combining of multiple transmitters to a single antenna with the least loss.

- High Q
- Low loss
- Temperature compensation
- Tuneable

Our Square cavities are designed for 19" rack mounting and have a high Q allowing the following minimum adjacent channel spacings:

Frequency Band	VHF Low	VHF High	UHF	900MHz	1800MHz
Channel Spacing (KHz)	100	150	200	300	500

Specifications	
Part No.	04-000401
Frequency Range (MHz)	800-1000
Qo	15,000
Insertion Loss (dB)	1.0
Power Rating CW (W)	100
V.S.W.R.	< 1.2: 1
Temperature Range (°C)	-20 to +55
Connectors	Type-N female
Impedance I/P O/P	50 ohms
Dimensions (mm)	250 x 250 x 150
Weight (kg)	8.5



04-000401 General Arrangement

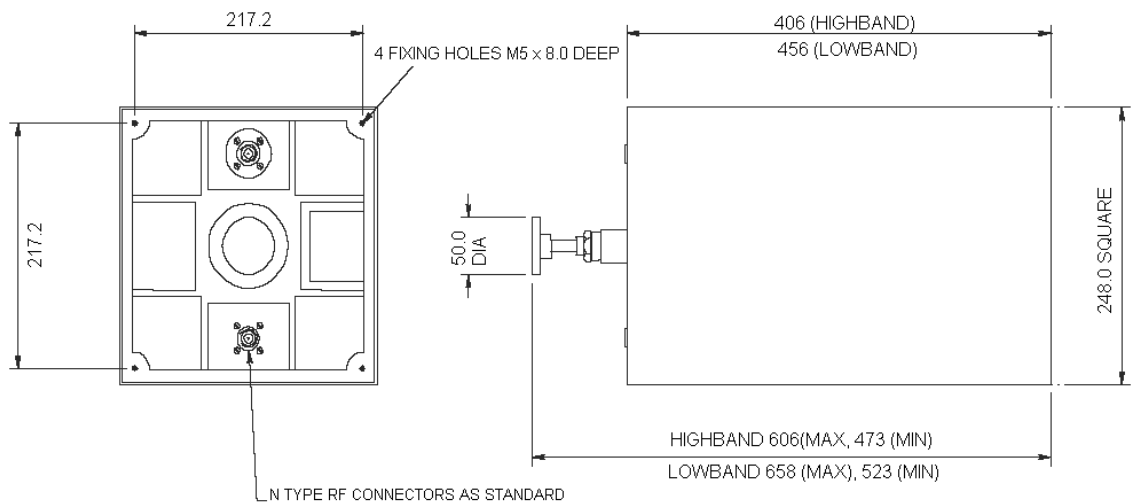
# Cavity Resonators (cont.)

## Selection Guide: Silver Plated Transmitter Cavity Resonators

Part No.	04-000211	04-000215	04-000801	04-000301
Frequency Range (MHz)	70-100	100-150	225-400	400-500
Q <sub>o</sub>	9,000	9,500	10,000	10,000
Insertion Loss (dB)	1.2	1.2	1.0	1.3
Power Rating CW (W)	100	100	100	100
V.S.W.R.	< 1.2:1	< 1.2:1	< 1.2:1	< 1.2:1
Temperature Range (°C)	-20 to +55	-20 to +55	-20 to +55	-20 to +55
Connectors	Type-N female	Type-N female	Type-N female	Type-N female
Impedance I/P O/P (ohms)	50	50	50	50
Dimensions (mm)	250 x 250 x 410	250 x 250 x 410	250 x 250 x 410	250 x 250 x 275
Weight (kg)	13	13	12	8

## Selection Guide: Plain Finish Transmitter Cavity Resonators

Part No.	04-003301	04-002001	04-004201	04-004102
Frequency Range (MHz)	70-100	100-150	225-400	400-500
Q <sub>o</sub>	9,000	9,500	10,000	10,000
Insertion Loss (dB)	1.2	1.2	1.0	1.3
Power Rating CW (W)	100	100	100	100
V.S.W.R.	< 1.2:1	< 1.2:1	< 1.2:1	< 1.2:1
Temperature Range (°C)	-20 to +55	-20 to +55	-20 to +55	-20 to +55
Connectors	Type-N female	Type-N female	Type-N female	Type-N female
Impedance I/P O/P (ohms)	50	50	50	50
Dimensions (mm)	250 x 250 x 410	250 x 250 x 410	250 x 250 x 410	250 x 250 x 275
Weight (kg)	8	7	7	7



VHF Cavity general arrangement