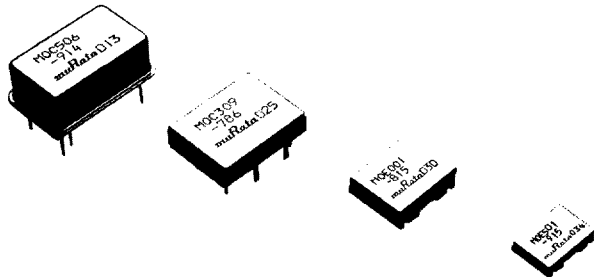


# VOLTAGE CONTROLLED OSCILLATORS (VCO)



## MQC/MQE Series



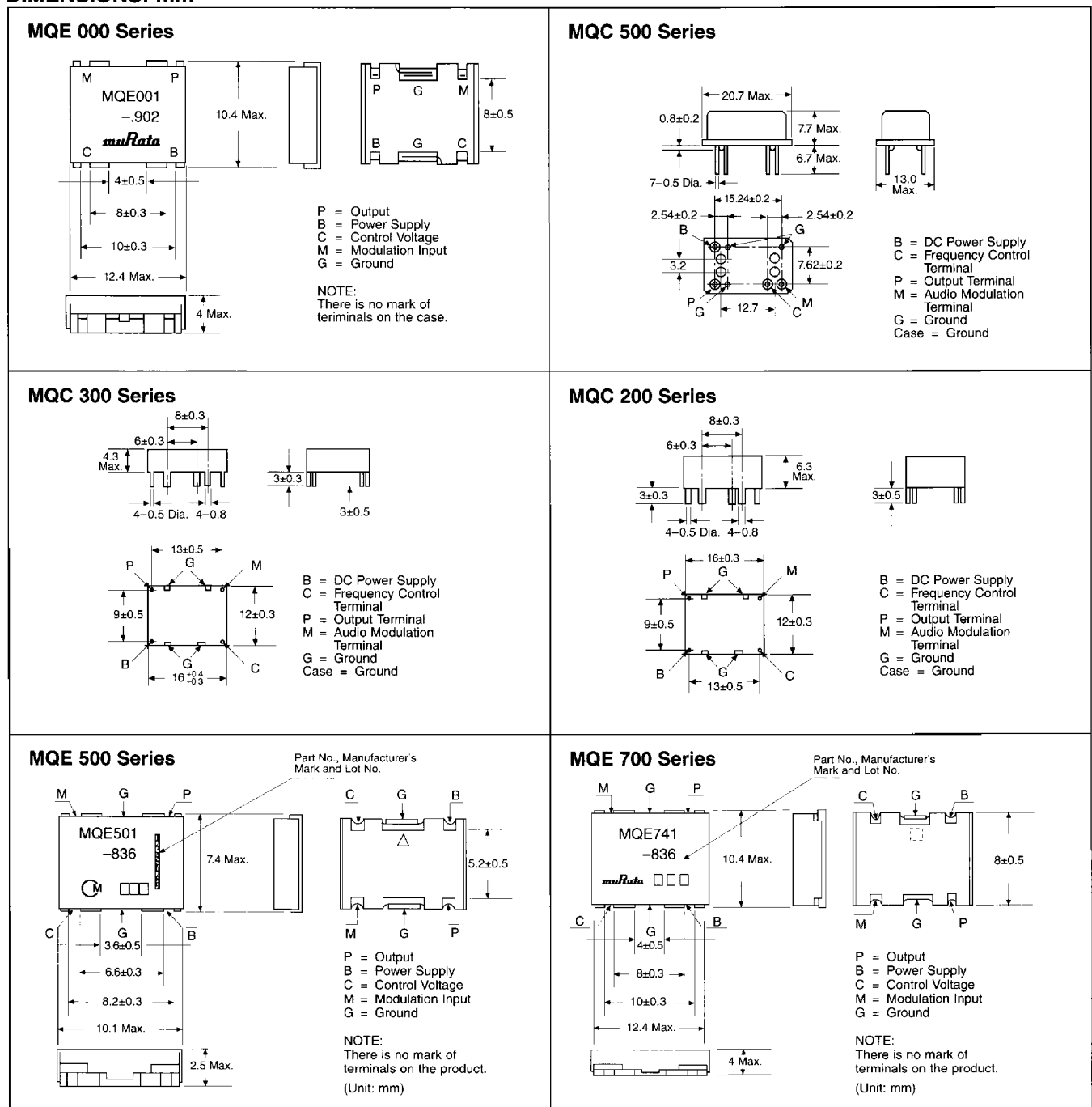
### FEATURES

- Small and lightweight
- Low power consumption
- Excellent temperature stability

### APPLICATIONS

- Mobile and Hand Held Telephone
- Cordless Telephone (European)
- Personal Radio
- MCA Radio

### DIMENSIONS: mm



# VCO SPECIFICATIONS

## MQC/MQE Series

### EAMPS/ADC

Application	Parts Number	Oscillation Frequency (MHz)	Supply Power (V)	Control Volt. Range (V)	Control Volt. Sensitivity (MHz/V)	Output Level (dBm)	Power Consumption (mA max.)	Audio Mod Sensitivity (Vrms) dev.	S/N (dBm) S. level	C/N (dBc/Hz min.) Sep.
TX	MQE001-836-T1	836.5±12.5	4.2±0.25	1.0-4.0	11±2	-4 min.	6.5	0.124-0.248 (±8kHz)	52 (±8kHz)	110 (25kHz)
	MQE501-836-T1	836.5±12.5	4.3±0.25	1.0-4.0	13±2	-1 min.	7.0	0.290-0.420 (±10kHz)	45 (±8kHz)	114 (60kHz)
	MQE741-836-T1	836.5±12.5	4.2±0.25	0.7-4.3	12±2	-6 min.	6.0	0.173-0.289 (2.9kHz)	50 (±8kHz)	108 (60kHz)
	MQC309-836	836.5±12.5	5.0±0.25	1.0-4.0	11±2	1±3	8.0	0.124-0.248 (10kHz)	45 (±3kHz)	114 (60kHz)
	MQC505-836	836.5±12.5	5.0±0.25	1.0-4.0	11±2	0 min.	8.0	0.124-0.248 (10kHz)	45 (±3kHz)	111 (60kHz)
RX	MQE001-926-T1	926.5±12.5	4.2±0.25	1.0-4.0	12±2	-2±3	6.5	—	52 (±8kHz)	110 (25kHz)
	MQE001-953-T1	953.0±13.0	4.2±0.25	0.7-4.3	10.5±2	-5 min.	8.0	—	45 (±3kHz)	112 (30kHz)
	MQE501-785-T1	785.8±12.5	4.3±0.25	1.0-4.0	13±2	-1 min.	7.0	—	45 (±8kHz)	114 (60kHz)
	MQE741-926-T1	926.5±12.5	4.2±0.25	0.7-4.3	12±2	-6 min.	6.0	—	50 (±8kHz)	109 (60kHz)
	MQC309-926	926.5±12.5	5.0±0.25	1.0-4.0	12±2	1±2.5	8.0	—	48 (±8kHz)	114 (60kHz)
	MQC505-964	964.5±12.5	5.0±0.25	1.0-4.0	12±2	2±3	8.0	—	45 (±3kHz)	119 (60kHz)

### ETACS

Application	Parts Number	Oscillation Frequency (MHz)	Supply Power (V)	Control Volt. Range (V)	Control Volt. Sensitivity (MHz/V)	Output Level (dBm)	Power Consumption (mA max.)	Audio Mod Sensitivity (Vrms) dev.	S/N (dBm) S. level	C/N (dBc/Hz min.) Sep.
TX	MQE001-888-T1	888.5±16.5	4.2±0.25	1.0-4.0	14±2	-4 min.	6.5	0.124-0.248 (±6.4kHz)	52 (±6.4kHz)	110 (25kHz)
	MQC309-888	888.5±16.5	5.0±0.25	1.0-4.0	13±2	-2 min.	8.0	0.124-0.248 (10kHz)	45 (±3kHz)	113 (50kHz)
	MQC505-888	888.5±16.5	5.0±0.25	1.0-4.0	13±2	-2 min.	8.0	0.124-0.248 (10kHz)	45 (±3kHz)	113 (50kHz)
RX	MQE001-978-T1	978.5±16.5	4.2±0.25	0.7-4.3	13±2	-3±3	10.0	—	52 (±6.4kHz)	109 (25kHz)
	MQE001-1016-T1	1016.5±16.5	4.2±0.25	0.5-4.5	12±2	-6 min.	10.0	—	45 (±3kHz)	111 (25kHz)
	MQE002-1025-T1	1025.5±16.5	4.3±0.25	0.7-4.3	12.5±2	-3.5±3	10.0	—	52 (±6.4kHz)	111 (25kHz)

### NMT/GSM

Application	Parts Number	Oscillation Frequency (MHz)	Supply Power (V)	Control Volt. Range (V)	Control Volt. Sensitivity (MHz/V)	Output Level (dBm)	Power Consumption (mA max.)	Audio Mod Sensitivity (Vrms) dev.	S/N (dBm) S. level	C/N (dBc/Hz min.) Sep.
TX	MQE001-902-T1	902.5±12.5	4.2±0.25	1.0-4.0	12±2	-3 min.	8.0	0.200-0.316 (±3kHz)	45 (±3kHz)	103 (12.5kHz)
	MQC309-902	902.5±12.5	5.0±0.25	1.0-4.0	9 min.	1±3	8.0	0.124-0.248 (10kHz)	45 (±3kHz)	106 (25kHz)
	MQC505-902	902.5±12.5	5.0±0.25	1.0-4.0	11±2	-2 min.	8.0	0.124-0.248 (10kHz)	45 (±3kHz)	113 (25kHz)
RX	MQE001-1018-T1	1018.5±12.5	4.2±0.25	1.0-4.0	12±2	-6 min.	10.0	—	45 (±3kHz)	111 (25kHz)
	MQE002-1030-T1	1030.5±12.5	4.2±0.25	1.0-4.0	10 min.	-2±3	12.0	—	45 (±3kHz)	111 (25kHz)

**CORDLESS (EUROPEAN)**

Application	Parts Number	Oscillation Frequency (MHz)	Supply Power (V)	Control Volt. Range (V)	Control Volt. Sensitivity (MHz/V)	Output Level (dBm)	Power Consumption (mA max.)	Audio Mod Sensitivity (Vrms) dev.	S/N (dBm) S. level	C/N (dBc/Hz min.) Sep.
TX	MQE301-886-T1	886.0±1.5	4.0±0.2	1.0-3.5	5±2	-1.5±2.5	9.0	0.280-0.470 (20kHz)	45 (±3kHz)	68 (3kHz)
	MQE301-931-T1	931.0±1.5	4.0±0.2	1.0-3.5	5±2	-1.5±2.5	9.0	0.280-0.470 (20kHz)	45 (±3kHz)	68 (3kHz)
	MQC302-886	886.0±1.0	4.0±0.2	1.0-3.0	4.5±2	0±3	8.5	0.280-0.470 (10kHz)	45 (±3kHz)	67 (3kHz)
	MQC302-931	931.0±1.0	4.0±0.2	1.0-3.0	4.5±2	0±3	8.5	0.280-0.470 (10kHz)	45 (±3kHz)	67 (3kHz)
	MQC506-914	914.5±0.25	5.0±0.25	1.5-3.5	1.5 min.	-2 min.	8.0	0.280-0.470 (10kHz)	45 (±3kHz)	70 (60kHz)
	MQC506-959	959.5±0.25	5.0±0.25	1.5-3.5	1.5 min.	-2 min.	8.0	0.280-0.470 (10kHz)	45 (±3kHz)	70 (3kHz)
RX	MQE301-828-T1	827.9±1.5	4.0±0.2	1.0-3.5	5±2	-1.5±2.5	9.0	—	—	70 (3kHz)
	MQE301-931-T1	931.0±1.5	4.0±0.2	1.0-3.5	5±2	-1.5±2.5	9.0	—	—	70 (3kHz)
	MQC302-828	828.0±1.0	4.0±0.2	1.0-3.0	4.5±2	1±3	8.5	—	45 (±3kHz)	70 (3kHz)
	MQC302-989	989.0±1.0	4.0±0.2	1.0-3.0	4.5±2	1±3	8.5	—	45 (±3kHz)	71 (3kHz)
	MQC506-856	856.5±0.25	5.0±0.25	1.5-3.5	2 min.	-2 min.	8.0	—	45 (±3kHz)	70 (3kHz)
	MQC506-1017	1017.5±0.25	5.0±0.25	1.5-3.5	2 min.	-2 min.	8.0	—	45 (±3kHz)	70 (3kHz)

**GPS**

Application	Parts Number	Oscillation Frequency (MHz)	Supply Power (V)	Control Volt. Range (V)	Control Volt. Sensitivity (MHz/V)	Output Level (dBm)	Power Consumption (mA max.)	Audio Mod Sensitivity (Vrms) dev.	S/N (dBm) S. level	C/N (dBc/Hz min.) Sep.
	MQE001-787-T1	787.5±12.5	5.0±0.25	1.0-4.0	11±2	2±3	8.5	—	45 (±3kHz)	109 (12.5kHz)
	MQC530-1395	1395±4.5	5.0±0.25	1.0-4.0	3 min.	-2 min.	20.0	—	—	85 (10kHz)
	MQC530-1485	1485.44±3.0	4.5±0.2	1.0-4.0	5±3	-3 min.	15.0	—	—	75 (1kHz)

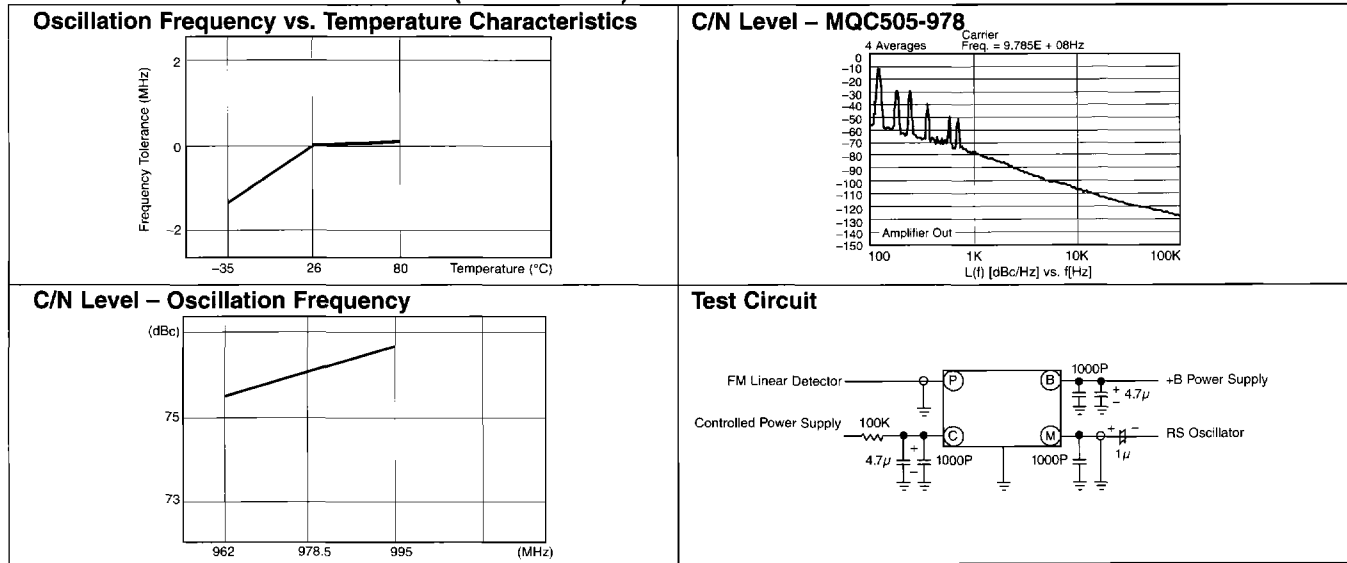
**ISM**

Application	Parts Number	Oscillation Frequency (MHz)	Supply Power (V)	Control Volt. Range (V)	Control Volt. Sensitivity (MHz/V)	Output Level (dBm)	Power Consumption (mA max.)	Audio Mod Sensitivity (Vrms) dev.	S/N (dBm) S. level	C/N (dBc/Hz min.) Sep.
	MQE001-915-T1	915±12.5	4.2±0.25	1.0-4.0	12±2	-2±3	7.0	—	52 (±8kHz)	110 (25kHz)
	MQE501-915-T1	915±12.5	4.5±0.25	0.7-4.3	11.5±3	-5 min.	10.0	0.235-0.471 (±10kHz)	45 (±3kHz)	110 (25kHz)
	MQE740-915-T1	915±12.5	5.0±0.25	1.0-4.0	9 min.	-3 min.	8.0	0.290-0.420 (±10kHz)	45 (±3kHz)	108 (60kHz)
	MQE741-775-T1	775±12.5	4.5±0.25	1.0-4.0	11 min.	-5 min.	8.0	—	52 (±8kHz)	105 (25kHz)
	MQC505-915	915±12.5	5.0±0.25	1.0-4.0	9 min.	-2 min.	8.0	—	45 (±3kHz)	113 (60kHz)
	MQC515-915	915±12.5	5.0±0.25	1.0-4.0	9 min.	-2 min.	8.0	0.124-0.248 (100kHz)	45 (±3kHz)	113 (60kHz)

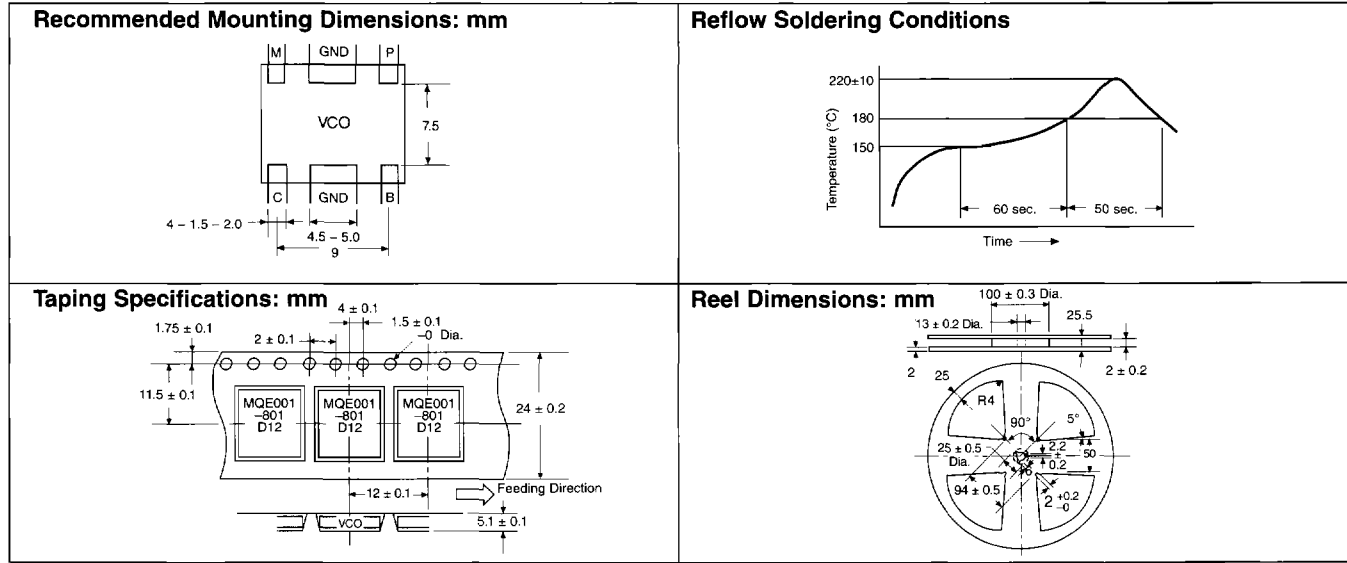
# VCO SPECIFICATIONS

## MQC/MQE Series

### VCO TYPICAL CHARACTERISTICS (MQC505-978)



### MOUNTING AND PACKING – MQEO/MQE7



### MOUNTING AND PACKAGING – MQE5

