

Quartz Crystal Monitor (QCM)

General application

Thin film thickness measurement (vacuum evaporation and sputtering),
speed of thin film growth, sensor surface weight change - a highly sensitive microbalance.



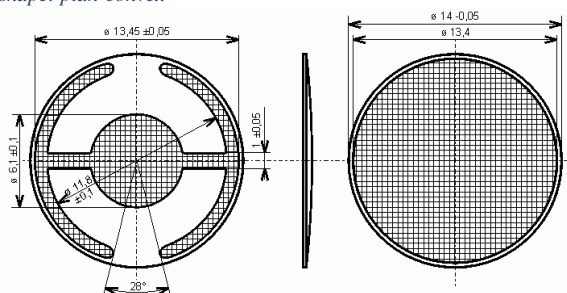
Typical specifications

Type	Quartz Crystal Monitor		
Frequency Range	4990 kHz ... 5040 kHz	5970 kHz ... 6040 kHz	10000 kHz...10040 kHz
Operating Temp. Range	+15 ... +55 °C	+20 ... +125 °C	+15 ... +30 °C
Freq. Stability vs. Temp.	$\pm 5 \times 10^{-6}$	$\pm 40 \times 10^{-6}$	$\pm 5 \times 10^{-6}$
Resistance	20 Ω max.	20 Ω max.	30 Ω max.
Metalization	Au, Ag, Cr+Au, Cr+Ag, Ti+Au, Ti+Ag		
Design	Model 1 or 2		Model 3 or 4
Drive level	100 μ W max.		

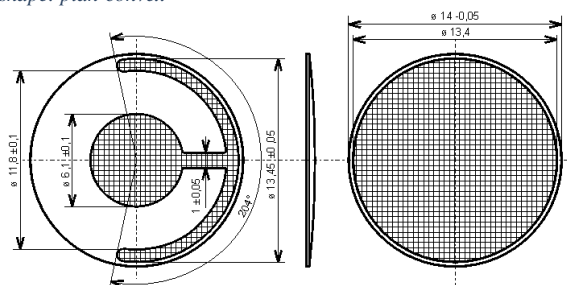
Differences from standard values (e.g. frequency, dimensions, metalization and electrode shape) can be consulted.

Outline dimensions [mm]

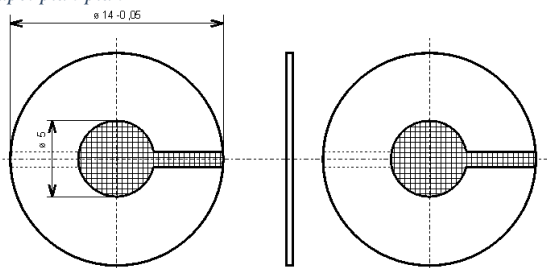
- Model 1 - shape: plan-convex



- Model 2 - shape: plan-convex



- Model 3 - shape: plan-plan



- Model 4 - the same as Model 3, diameter 20.0 mm