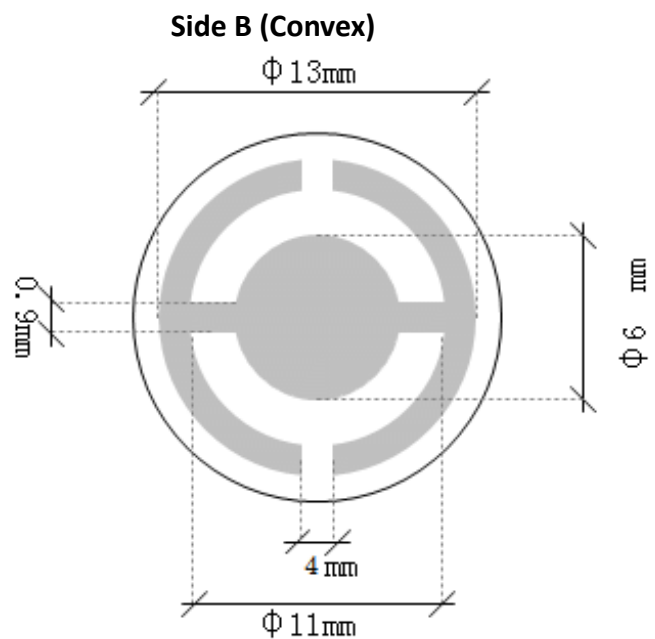
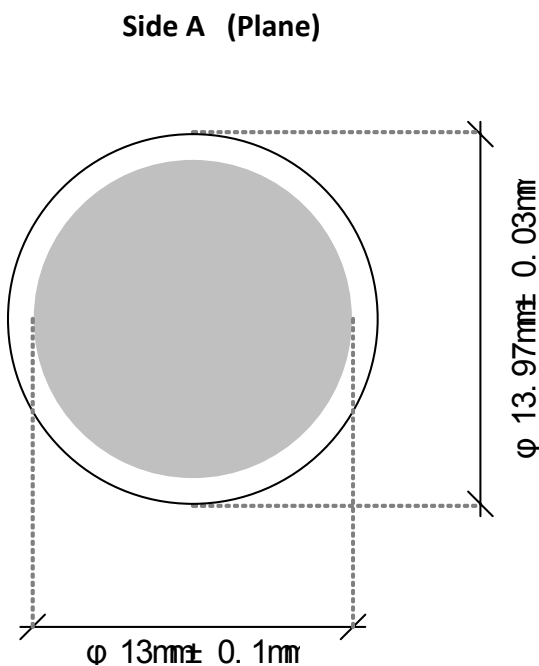


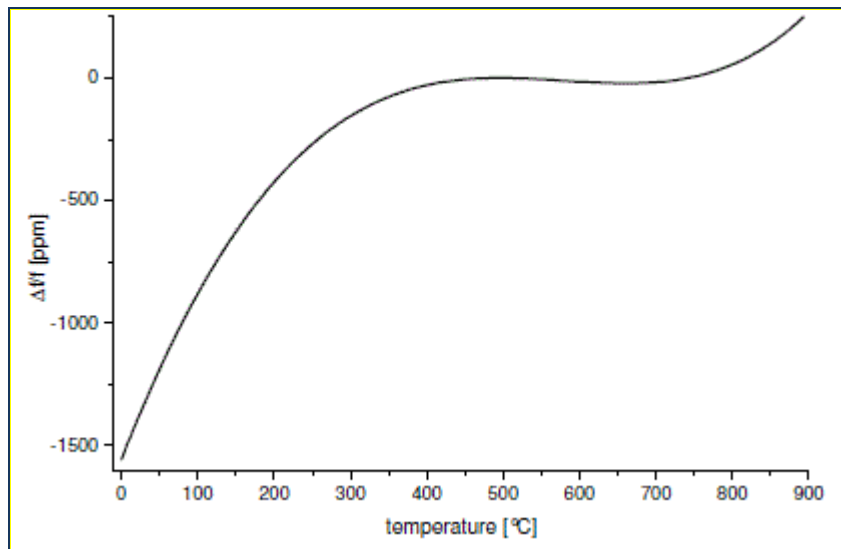
Specification	AXGCM5800-500-Pt	Rev.:1	Date: 2014-06-02
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Type : **GaPO₄ - Crystal Microbalance Element (Monitor Crystal)**
QCM for High Temperature Applications

Parameter	min.	typ.	max.	Unit	Condition
Nominal frequency		5.800		MHz	
Adjustment frequency		5.800		MHz	
Crystal cut		Y-11.1°			
Overtone		1			
Adjustment tolerance	-100		+100	kHz	
Frequency vs. temperature					See chart page 2
Turn-over temperature T ₀		+505		°C	
First order temperature coefficient		0.00831		ppm/K	ref. to T ₀
Second order temperature coefficient		-0.00186		ppm/K ²	ref. to T ₀
Third order temperature coefficient		8.5·10 ⁻⁶		ppm/K ³	ref. to T ₀
Resonance resistance R _r			10	Ω	
Motional capacitance C ₁		80		fF	
Shunt capacitance C ₀		32		pF	
Drive level		100		μW	
Operating temperature range	0		+900	°C	
Storage temperature range	-40		+900	°C	
QCM diameter		13.97 ± 0.03		mm	
Blank surface quality		Fine lapped			
Contour		Plano-convex R= 265mm			
Electrode diameter Side A (plano)		13.0 ± 0.1		mm	Fully plated
Electrode material Side A		Ti-Pt			
Electrode diameter Side B (convex)		6.0		mm	See drawing
Electrode material Side B		Ti-Pt			
Maximum operating temperature			850	°C	



Frequency vs. temperature response characteristics



Ordering Code:

Model (Specification)	Frequency [MHz]
AXQCM5800-500-Pt	5.800

Revision History

Rev.	Drawing	Date [dd.mm.yyyy]	Remarks	Author	Checked
1	1	12.02.2014	First issue	BN	BN
1	D1	02.06.2014	Editorial changes	BN	BN