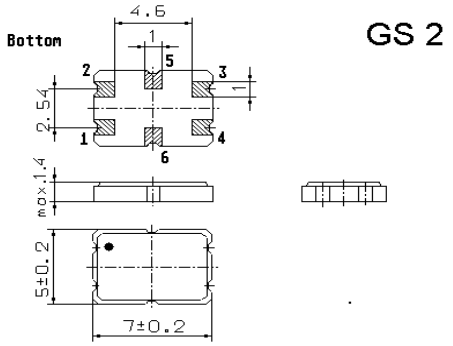
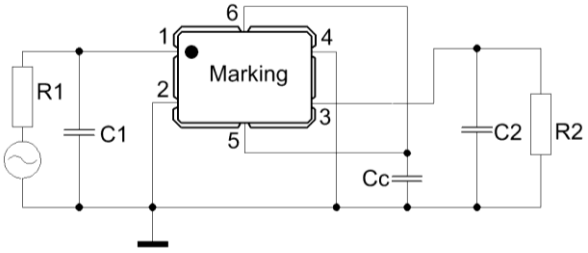
01 December 2009

Specification for monolithic crystal filter: **M Q F 7 0 . 0 - 2 2 0 0 / 0 2**

1. General

1.1. Package:





1.2.	Type name:	MQF 70.0-2200/02
1.3.	Number of poles:	4
1.4.	Operating temperature range:	-40°C to +85°C
1.5.	Storage temperature range:	-45°C to +85°C

2. Electric values

2.1.	Nominal centre frequency fo:	70.0 MHz
2.2.	**Pass band**	
2.2.1.	Bandwidth between 3 dB - frequencies:	> fo ± 11.0 kHz
2.2.2.	Ripple:	< 1.0 dB at fo ± 8.0 kHz
2.2.3.	Insertion loss: (measured on smallest attenuation in pass band)	< 5.0 dB
2.3.	**Stop band**	
2.3.1.	fo ± 30 kHz	> 15 dB
2.3.2.	fo ± 40 kHz	> 30 dB
2.3.3.	fo ± 65 kHz	> 50 dB
2.3.4.	Alternate attenuation fo ± 910 kHz	> 65 dB (except spurious)
2.4.	Terminating impedance R//C (input and output):	800 Ω // 1.0 pF
2.4.1.	Coupling capacitance Cc:	4.0 pF
2.5.	Input power level for reference measurement:	+0 dBm
2.5.1.	Maximum input power level without destruction:	+10 dBm
2. 6.	Out band Intermodulation	
2.6.1.	frequency 1, 2:	fo ± 100 / 200 kHz
2.6.2.	Input power level:	-10 dBm
2.6.3.	Intermodulation (IP3 > +25 dBm)	> 70 dB down from both -10dBm input tones
3.	Marking:	• M70A4 yyww

4. Environment conditions:
   a. vibration: MIL-STD-810G, method 514.6 procedure I
   b. shock: MIL-STD-810G, method 516.6 procedure I + IV + V

5. Filters are Pb-free and 2002 /95 / EC RoHS compliant

Edited by: date: _____ name: _____