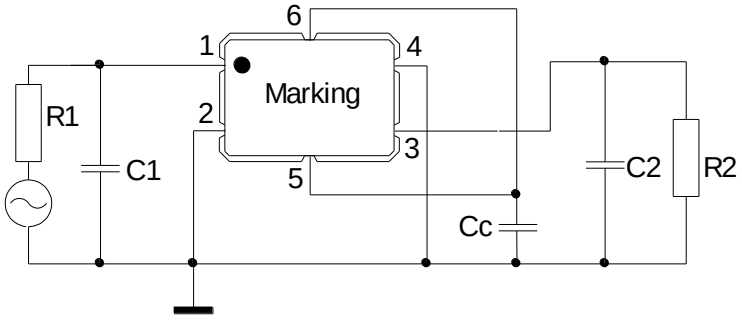
06 February 2014

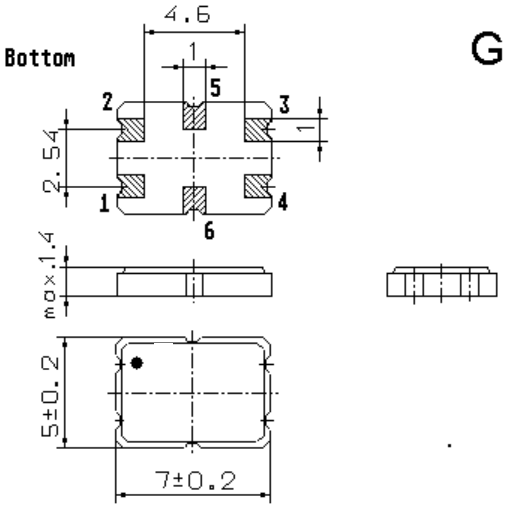
Specification for monolithic crystal filter: **M Q F 7 0 . 0 - 3 0 0 0 / 1 9**

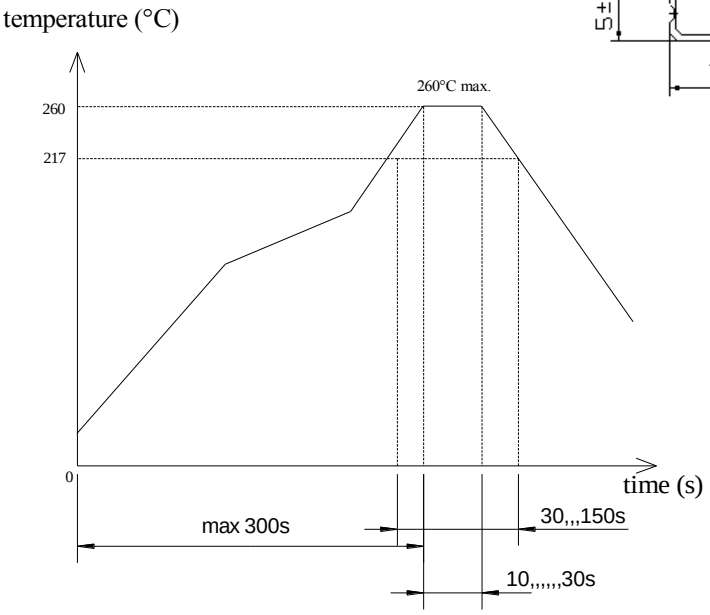
1. General

1.1. Package:



pin1	INPUT
pin2,4	GND
pin3	OUTPUT
pin5,6	Coupling capacitance Cc





Reflow soldering: three times max.

1.2.	Type name:	MQF 70.0-3000/19
1.3.	Number of poles:	4
1.4.	Operating temperature range (OTR) :	-40°C to +85°C
1.5.	Storage temperature range:	-45°C to +85°C

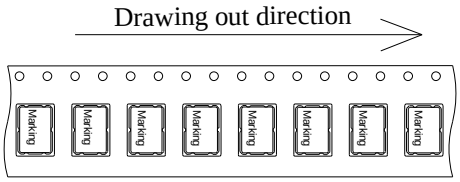
2. Electric values

2.1.	Nominal centre frequency fo:	70.0 MHz
2.1.1.	Frequency shift in OTR referred to +25°C:	< ± 25 ppm
2.2.	Pass band	
2.2.1.	Bandwidth between 3 dB - frequencies:	> fo ± 15.0 kHz
2.2.2.	Ripple:	< 1.0 dB at fo ± 12.0 kHz
2.2.3.	Group delay distortion:	< 12 µs at fo ± 12.0 kHz
2.2.4.	Insertion loss: (measured on smallest attenuation in pass band)	< 4.0 dB
2.2.5.	Return Loss	> 10 dB at fo ± 5.0 kHz
2.3.	Stop band	
2.3.1.	fo ± 25 kHz	> 8 dB
2.3.2.	fo ± 80 kHz	> 50 dB
2.3.3.	Alternate attenuation at fo -910 kHz	> 75 dB
2.3.4.	Spurious responses	> 40 dB
2.4.	Terminating impedance R//C (input and output):	600 Ω // 1.0 pF
2.4.1.	Coupling capacitance (Cc):	6 pF
2.5.	Maximum input power, working / non-damaged	0 / +10 dBm
2.6.	Inband Intermodulation (IP3 > 15 dBm)	
2.6.1.	frequency 1/2:	70.005 MHz / 69.995 MHz
2.6.2.	Input power level:	-10 dBm
2.6.3.	IMD	> 50 dB
3.	Marking:	• M7019 yyww
4.	Environment conditions:	Corr. to Vectron MIL standard

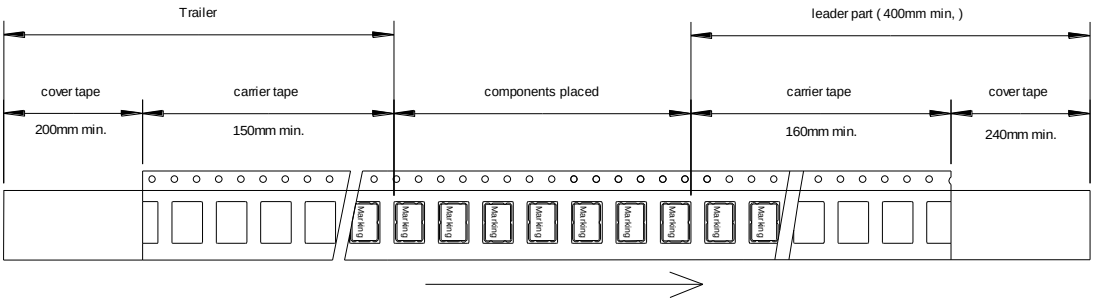
5. Filters are Pb-free and 2002 /95 / EC RoHS compliant

6. Packing

maximum 1000 pcs. / reel

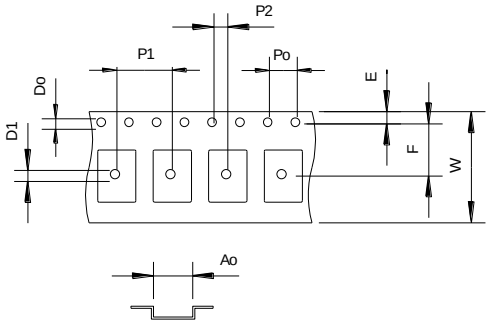


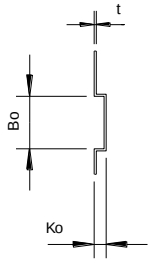
Tape dimension (mm)



Tape (all dimensions in mm)

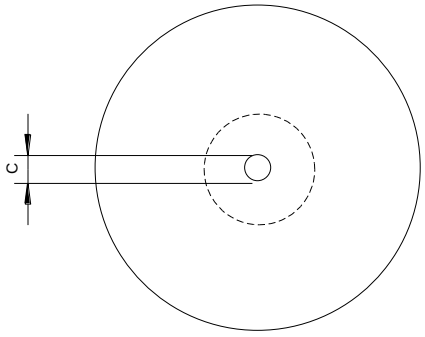
W: 16.0 ± 0.1
Po: 4.0 ± 0.1
P1: 8.0 ± 0.1
P2: 2.0 ± 0.1
Do: 1.5 +0.1 / -0
D1: 1.6 +0.1 / -0
E: 1.75 ± 0.1
F: 7.5 ± 0.1
Ko: 1.7 ± 0.1
Ao: 5.6 ± 0.1
Bo: 7.6 ± 0.1
t: 0.3 ± 0.05

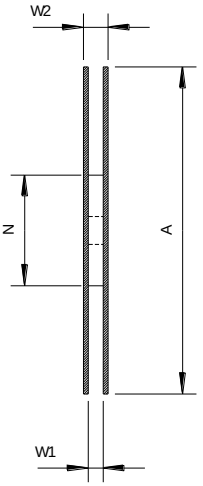




Reel (all dimension in mm)

A: ø 178 ± 2
C: ø 13 ± 0.5
N: ø 60 ± 1
W1: 17.5 ± 1.5
W2: 21.5 ± 1.5





Edited by: date: _____ name: _____