



RM098

Low Cost Inverted Mesa Crystals Blanks 50 - 750 MHz for 5 x7 mm SMD & UM-1/HC45

XECO's RM098 series offer high performance and low cost plated crystals for 5x7 SMD assembly for frequencies ranging from 50 to 750 MHz operation. The RM098 will fit into modified clip UM-1 and HC45 style packages. XECO proprietary processes yield a clean mesa and transition area to achieve high performance, and XECO plating assures accurate electrode placement for maximizing performance at high frequencies.

This series of plated crystal blanks are tested for frequency and ESR in production, and have been characterized for C1, C0, L, and Q values, as well as spurious modes verified to be less than -4dB or -6dB for clock and VCXO applications. Plating process are chrome-gold for lower frequencies and Aluminum with gold contacts for higher frequencies where spurious response and mass loading effects increase. 100% aluminum metal and special element designs for filter and MCF applications is available. Please contact us with your requirements.

Features

Stable oscillation
2.489 mm x 1.829 mm size for mounting across typical 5 x 7mm SMD package or UM1/HC45 mounts
Tune Low and Tune High options
High Q, chemically etched, free of etch channels or scratches in the Mesa area
Accurate placement of electrodes

Benefits:

Lowest cost solution
Excellent oscillator performance
Tested Specifications increase yield potential
Optimized for 5x7mm package

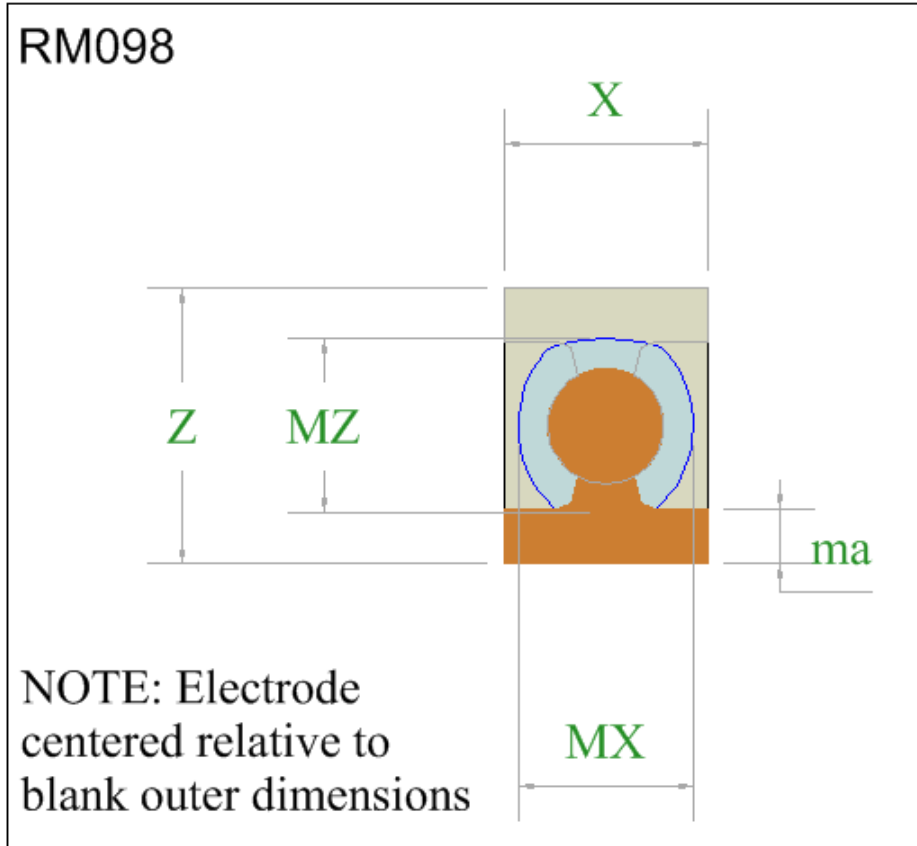
Applications

Volume clock oscillators and VCXO
Customer applications for SONET, 10G, 1G, Storage, network communications
Small packaged crystals for precise frequency control applications

Operation Mode	Fundamental or Overtone
Frequency Range	50 to 750 MHz
Frequency Range 3Rd:	150MHz to 2.25GHz
Frequency Tolerance	
Material and Q	Low Etch Channel Pure Z Quartz with a Q minimum of 1.8 Million
Surface Finish	Polished
Angle	Std AT cut 35D8' to 35D29' [EFG 3D6' to 2D45']
Angle Tolerance	+/- 2', +/-1', +/-0.5'
Dimensions (mm)	2.489 x 1.829 x 0.109 mm
Dimensions (inches)	0.098 x 0.072 x 0.00429"
Electrode Size	0.125mm to 1.35 mm, 5 mils to 53 mils
Electrode Style	Contacts at opposite ends
Electrode Material	Chrome Gold or Aluminum
Electrode Freq. Tol.:	+/- 0.015 F ² (4732KHz at 156.25)
Contact Material:	Electrode Chrome-Gold or Aluminum; Contact: Chrome-Gold
Ship Pack Method	Vacuum sealed wafflepack
Specification Note	Custom or special requirements available

*Xeco standard plateback or per customer requirements

Device Dimensions



mm		
	mm	Tolerances
X	2.489	+0.000 -0.025
Z	1.829	+0.000 -0.025
MX	1.575	+0.025 -0.025
MZ	1.575	+0.025 -0.025
ma	0.490	+0.001 -0.001
mb		+0.003 -0.003
mc		+0.001 -0.001
md		+0.001 -0.001
m:		+0.002 -0.002
tx		+0.013 -0.013
t:		+0.013 -0.013
m:		NA
arcS		NA

Inches		
	mils (0.001")	Tolerances
X	72.00	+0.00 -1.00
Z	98.00	+0.00 -1.00
MX	62.00	+1.00 -1.00
MZ	62.00	+1.00 -1.00
ma	19.30	+0.05 -0.05
mb		+0.10 -0.10
mc		+0.05 -0.05
md		+0.05 -0.05
m:		+0.08 -0.08
tx		+0.5 -0.5
t:		+0.5 -0.5
m:		NA
arcS	NA	NA