

The RM196 Series fits easily into typical 5.0 x 7.0 mm packages with excellent oscillator and filter performance; essentially a "ruggedized" upgrade from XECO's established RX196, which is more suitable for automatic assembly/mounting equipment, and able to be processed to higher frequencies and higher manufacturing yields, whether manual or automatic assembly is used.

XECO proprietary processes yield a clean mesa and transition area to achieve high performance, and XECO plated versions provide cost effective high performance alternatives to in-house plating operations. XECO offers three plating options and a range of electrodes to match performance needs.

Special or custom designs are supported.

### Features

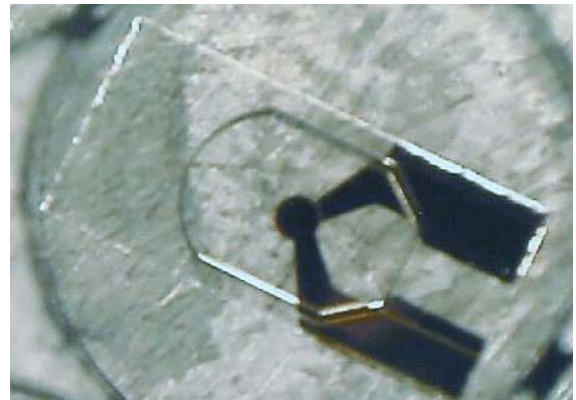
4.98 mm x 2.39 mm size for 5.0 x 7.0 (7.5) mm  
High Q, chemically etched, free of etch channels  
Mesa oriented across X-Axis  
Electrodes in various sizes for specific frequency and C1/C0 ratios  
Three metal plating options  
Tune Low and Tune High options

### Benefits:

High volume product which fit packages and tooling  
High performance operation and wide frequency of operation  
Cost effective solution

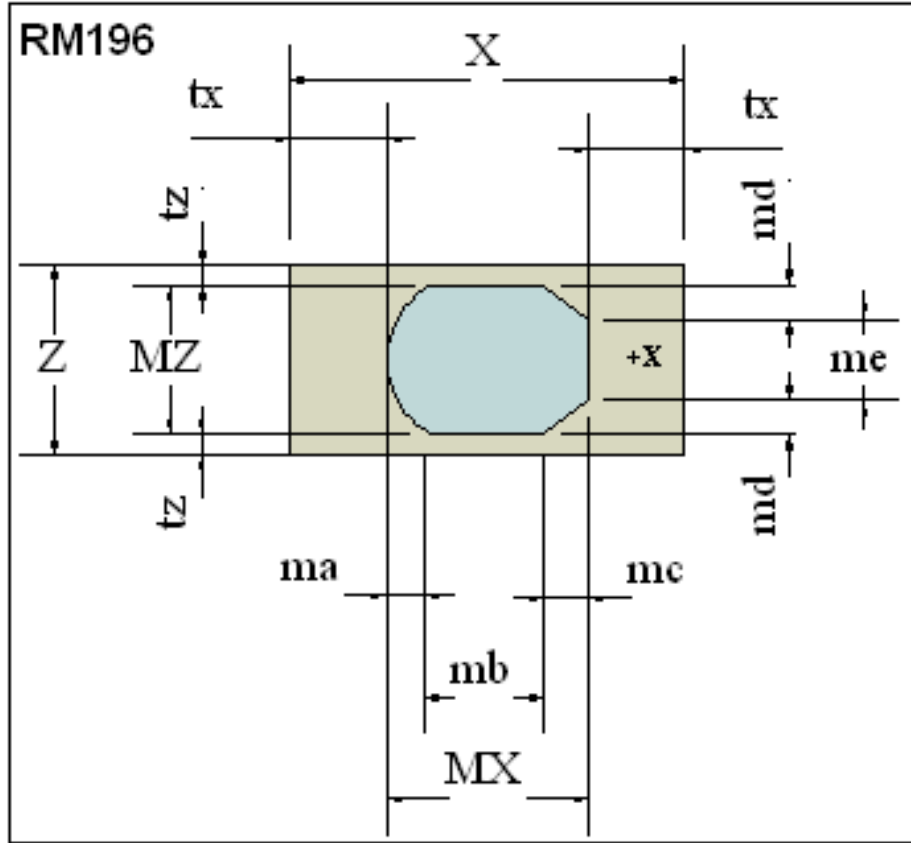
### Applications

Crystals for precise frequency control applications in high volume packaging  
Customer applications for SONET, 10G, 1G, Storage, network communications



<b>Operation Mode</b>	Fundamental or Overtone
<b>Frequency Range</b>	30 to 550MHz
<b>Frequency Range 3Rd:</b>	90 to 1.650 GHz
<b>Frequency Tolerance</b>	+/- 0.010 F <sup>2</sup> (489KHz at 156.25)
<b>Material and Q</b>	Low Etch Channel Pure Z Quartz with a Q minimum of 1.8 Million
<b>Surface Finish</b>	Polished
<b>Angle</b>	Std AT cut 35D8' to 35D29' [EFG 3D6' t
<b>Angle Tolerance</b>	+/- 2', +/-1', +/-0.5'
<b>Dimensions (mm)</b>	4.98 x 2.39 mm
<b>Dimensions (inches)</b>	0.196 x 0.094"
<b>Electrode Size</b>	0.125mm to 1.27 mm, 5 mils to 50 mils
<b>Electrode Style</b>	Contacts at same end
<b>Electrode Material</b>	Chrome Gold or Aluminum
<b>Electrode Freq. Tol.:</b>	+/- 0.015 F <sup>2</sup> (
<b>Contact Material:</b>	Same as Electrode or Chrome-Gold with Aluminum
<b>Ship Pack Method</b>	Vacuum sealed wafflepack
<b>Specification Note</b>	Custom or special requirements are available

### Device Dimensions



mm		
	mm	Tolerances
X	4.978	+0.000 -0.025
Z	2.388	+0.000 -0.025
MX	2.540	+0.025 -0.025
MZ	1.880	+0.025 -0.025
ma	0.483	+0.001 -0.001
mb	1.419	+0.003 -0.003
mc	0.559	+0.001 -0.001
md	0.432	+0.001 -0.001
m:	1.016	+0.002 -0.002
tx	1.219	+0.013 -0.013
t:	0.254	+0.013 -0.013
m:		NA
arcS		NA

Inches		
	mils (0.001")	Tolerances
X	196.00	+0.00 -1.00
Z	94.00	+0.00 -1.00
MX	100.00	+1.00 -1.00
MZ	74.00	+1.00 -1.00
ma	19.00	+0.05 -0.05
mb	55.88	+0.10 -0.10
mc	22.00	+0.05 -0.05
md	17.00	+0.05 -0.05
m:	40.00	+0.08 -0.08
tx	48.00	+0.5 -0.5
t:	10.00	+0.5 -0.5
m:		NA
arcS		NA

