



# RS196

## Inverted Mesa Crystals Blanks

100 - 700 MHz 5.0 x 7.0mm SMD packages

XECO's RS196 Series is designed to easily fit into 5.0 x 7.0 mm package with excellent performance in terms of low spurs, frequency accuracies, and aging. The RS196 offer a smaller mesa suited for higher frequency oscillation and increased ruggedness for automatic assembly / mounting operations. XECO's proprietary process yields a mesa which is clean and free of defects, enabling high performance operation for oscillators and filters.

These devices are supplied with electrodes using XECO's proprietary process to achieve consistent C1 and C0 values as well as supplied in blank form.

Various versions to meet commercial, industrial, telecom, military temperature ranges.

### Features

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

### Benefits:

High volume product which fit packages and tooling  
High performance operation and wide frequency of operation  
Meets needs of existing designs

### Applications

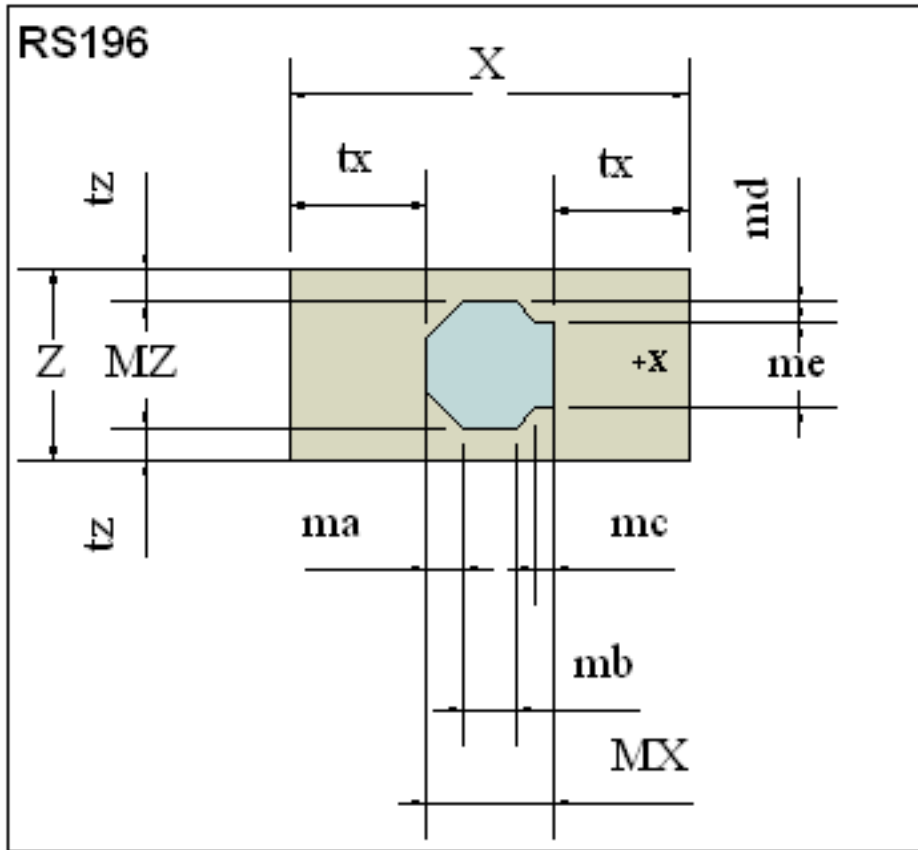
Crystals for precise frequency control applications in high volume packaging.  
Customer applications for SONET, 10G, 1G, Storage, network communications

<b>Operation Mode</b>	Fundamental or Overtone
<b>Frequency Range</b>	100 to 700 MHz
<b>Frequency Range 3Rd:</b>	300 to 2.100 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' or +/- 1'
<b>Dimensions (mm)</b>	4.98 x 2.39 x 0.080 mm
<b>Dimensions (inches)</b>	0.196 x 0.094 x 0.00315"
<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> (4
<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

For more information, sales and technical support:



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### Device Dimensions

mm		
	mm	Tolerances
X	4.978	+0.000 -0.025
Z	2.388	+0.000 -0.025
MX	1.600	+0.025 -0.025
MZ	1.600	+0.025 -0.025
ma	0.469	+0.001 -0.001
mb	0.663	+0.003 -0.003
mc	0.208	+0.001 -0.001
md	0.260	+0.001 -0.001
m:	1.079	+0.002 -0.002
tx	1.689	+0.013 -0.013
t:	0.394	+0.013 -0.013
m:	NA	NA
arcS	NA	NA

Inches		
	mils (0.001")	Tolerances
X	196.00	+0.00 -1.00
Z	94.00	+0.00 -1.00
MX	63.00	+1.00 -1.00
MZ	63.00	+1.00 -1.00
ma	18.45	+0.05 -0.05
mb	26.10	+0.10 -0.10
mc	8.20	+0.05 -0.05
md	10.25	+0.05 -0.05
m:	42.50	+0.08 -0.08
tx	66.50	+0.5 -0.5
t:	15.50	+0.5 -0.5
m:	NA	NA
arcS	NA	NA

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