XECO INC
1651 Bulldog, Cedar City, UT, 84721

RM138

Low Cost Inverted Mesa Crystals Blanks
50 - 420MHz 5 x 3.2mm SMD and UM-1/HC45

XECO's RM138 offers 50 to 420 MHz operation (measured in fundamental mode) and provide a drop-in solution for 5.0 x 3.2 mm and UM-1/HC45 packages for high frequency applications.

XECO proprietary processes yield a clean mesa and transition area to achieve high performance.

XECO RM138 with electrodes feature excellent alignment for best crystal oscillation performance. Two flag/contact styles are available: same end contacts as shown in the picture, suitable for ceramic SMD, and opposite end contacts, suitable for UM-1 and HC-45 style mounts or packaging.

These crystals are also supplied with Gold, Aluminum, or Aluminum electrodes with gold flags/contacts.

Features

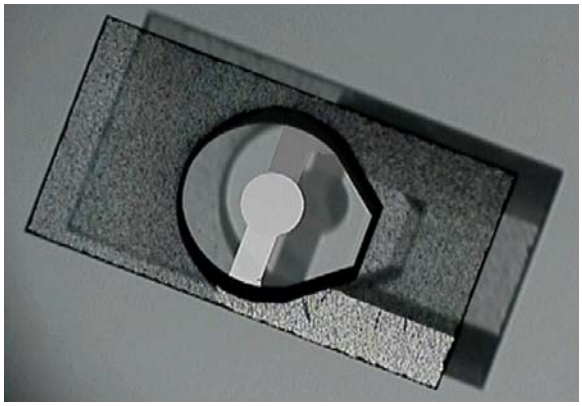
3.20 mm x 1.83 mm size for mounting across typical 5 x 7mm package crystal mounts
Electrodes in various sizes for specific frequency and C1/C0 ratios
Tune Low and Tune High options
High Q, chemically etched, free of etch channels or scratches in the Mesa area
Accurate placement of electrodes

Benefits:

Excellent oscillator performance
Easy mounting in 5 x3.2mm package
High Frequency Operation is available
Lower cost

Applications

Small packaged crystals for precise frequency control applications
Customer applications for SONET, 10G, 1G, Storage, network communications



Operation Mode	Fundamental or Overtone
Frequency Range	50 to 420 MHz
Frequency Range 3Rd:	150 to 1.260 GHz
Frequency Tolerance	+/- 0.010 F^2 (489KHz at 156.25)
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' t
Angle Tolerance	+/- 2', +/-1',+/-0.5'
Dimensions (mm)	3.50 x 1.83 x 0.109 mm
Dimensions (inches)	0.138 x 0.071 x 0.00429"
Electrode Size	0.125mm to 1.15 mm, 5 mils to 45 mils
Electrode Style	Contacts same end or opposite ends
Electrode Material	Chrome Gold or Aluminum
Electrode Freq. Tol.:	+/- 0.015 F^2 (
Contact Material:	Same as Electrode or Chrome-Gold with Aluminum
Ship Pack Method	Vacuum sealed wafflepack
Specification Note	Custom or special requirements are available

*Xeco standard plateback or per customer requirements

Phone: 435-586-0507 Fax: 435-586-2796 Email: sales@xeco.net

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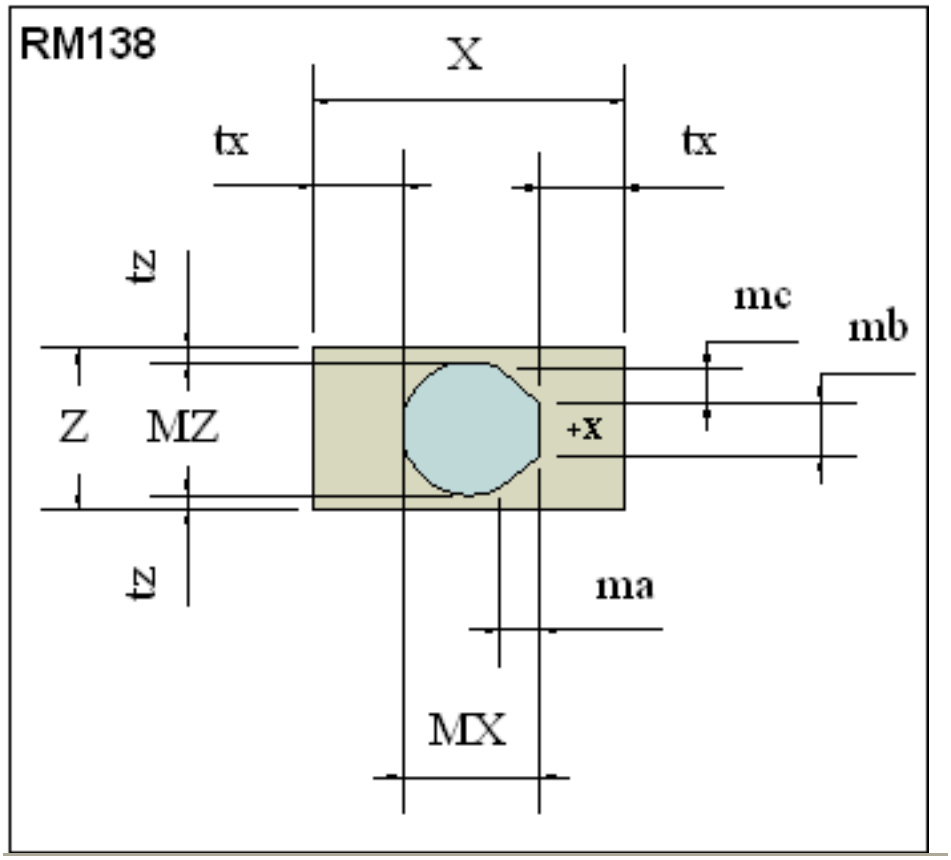

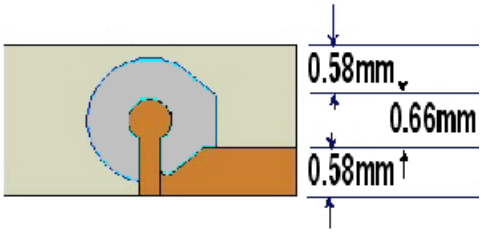

Device Dimensions

mm		
	mm	Tolerances
X	3.505	+0.000 -0.025
Z	1.820	+0.000 -0.025
MX	1.549	+0.025 -0.025
MZ	1.499	+0.025 -0.025
ma	0.462	+0.001 -0.001
mb	0.600	+0.003 -0.003
mc	0.369	+0.001 -0.001
md		+0.001 -0.001
m:		+0.002 -0.002
tx	0.978	+0.013 -0.013
t:	0.161	+0.013 -0.013
m:	NA	NA
arcS	NA	NA

Inches		
mils (0.001")		Tolerances
X	138.00	+0.00 -1.00
Z	71.65	+0.00 -1.00
MX	61.00	+1.00 -1.00
MZ	59.00	+1.00 -1.00
ma	18.18	+0.05 -0.05
mb	23.62	+0.10 -0.10
mc	14.54	+0.05 -0.05
md		+0.05 -0.05
m:		+0.08 -0.08
tx	38.50	+0.5 -0.5
t:	6.34	+0.5 -0.5
m:	NA	NA
arcS	NA	NA

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