

## **RM126**

# Low Cost Inverted Mesa Crystals Blanks 50 - 700 MHz for 5 x7 mm SMD & UM-1/HC45

The RM126 series offers 50 to 700 MHz operation (measured in fundamental mode) and is designed to fit in 5x7mm packages and provide a cost effective solution to high volume high frequency production. The RM126 will fit into modified clip UM-1 and HC45 style packages. The proprietary processes yields a clean mesa and transition area to achieve high performance, and our plating assures accurate electrode placement for maximizing performance at high frequencies.

This series offers standard round electrodes from 5 to 45 mils and special shapes are possible using the proprietary plating process which provides excellent alignment accuracy. Standard plating processes for oscillator are chrome-gold, or Aluminum with gold contacts to assure good bond with mounting adhesives, or 100% Aluminum.

These crystals blanks are also supplied with Gold, Aluminum, or Aluminum electrodes with gold flags/contacts. Special or custom designs are supported.

### **Features**

Stable oscillation

3.20 mm x 1.83 mm size for mounting across typical 5 x

7mm package crystal mounts

Various Electrodes sizes for 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

### **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 700 MHz Frequency Range 3Rd: 150 to 2.10 GHz

Frequency Tolerance +/- 0.010 F^2 (489KHz at 156.25)

Material and Q Low Etch Channel Pure Z Quartz with a

O 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)** 3.20 x 1.83 x 0.109 mm **Dimensions (inches)** 0.126 x 0.071 x 0.00429"

Electrode Size 0.125mm to 1.15 mm, 5 mils to 45 mils Electrode Style Contacts at opposite ends or same end

**Electrode Material** Chrome Gold or Aluminum

**Electrode Freq. Tol.:**  $\pm -0.015 \text{ F}^2$ 

**Contact Material:** Same as Electrode material or Chrome-Gold with Aluminum

Ship Pack Method Vacuum sealed wafflepack

**Specification Note** Custom or special requirements available

\*standard plateback or per your requirements

### **Benefits:**

Excellent oscillator performance Easy conversion to 5x7mm package High Frequency Operation is available Lower cost





# Low Cost Inverted Mesa Crystals Blanks 50 - 700 MHz for 5 x7 mm SMD & UM-1/HC45

# Z +x MZ tz mb MX



mm		
mm		Tolerances
X	1.829	+0.000 -0.025
Z	3.200	+0.000 -0.025
MX	1.524	+0.025 -0.025
MZ	1.524	+0.025 -0.025
ma	0.533	+0.001 -0.001
mb	0.762	+0.003 -0.003
mc		+0.001 -0.001
md		+0.001 -0.001
m:		+0.002 -0.002
tx	0.152	+0.013 -0.013
t:	0.838	+0.013 -0.013
m:	NA	NA
arcS	NA	NA
-		

Inches		
mils (0.001")		Tolerances
X	72.00	+0.00 -1.00
Z	126.00	+0.00 -1.00
MX	60.00	+1.00 -1.00
MZ	60.00	+1.00 -1.00
ma	21.00	+0.05 -0.05
mb	30.00	+0.10 -0.10
mc		+0.05 -0.05
md		+0.05 -0.05
m:		+0.08 -0.08
tx	6.00	+0.5 -0.5
t:	33.00	+0.5 -0.5
m:	NA	NA
arcS	NA	NA



