

# UM-1 Crystal

## •Part Number Guide

T-M-FF.FFFM-LC-FTFS-OT-ESR-B-G-S

T (Type型号) : A=UM-1 Crystal, 2 Leads.

A2=UM-1 Crystal, 3 Leads.

M (Mode of Operation振荡模式) : F=Fundamental T=Third Overtone, etc

F (Frequency标称频率) : Normal - 5 digitals of Frequency, e.g. 8.0000M, 12.000M

Special - All digitals of Frequency, e.g. 13.225625M

LC (Load Capacitance负载电容) : 20=20pf 00=series, etc

FT (Frequency Tolerance调整频差) : 30=±30 ppm, etc

FS (Frequency Stability温度频差) : 50=±50 ppm, etc

OT (Operating Temperature工作温度) : 1060=-10°C to +60°C 4085=-40°C to +85°C, etc

ESR (Equivalent Series Resistance等效阻抗)

B (Bulk Pack散装) OR TR (Tape and Reel编带)

G (Gull Wing夹持器)

S (Special Requirement特殊要求)



Pb Free

RoHS Compliant  
Directive 2002/95/EC

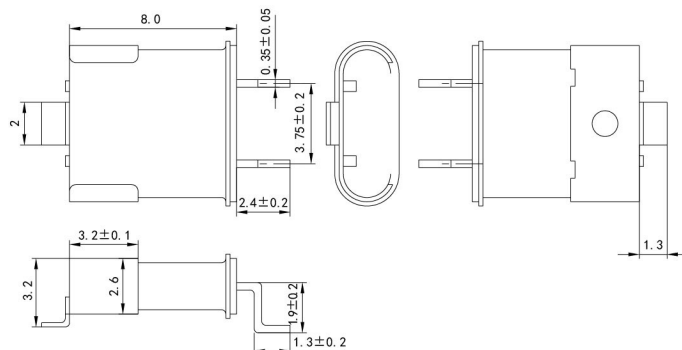
## •Electrical Specifications 电气参数

| 型号     | Holder Type                                  | UM - 1                           |
|--------|----------------------------------------------|----------------------------------|
| 频率范围   | Frequency Range                              | 8.0000MHz to 120.00MHz           |
| 调整频差   | Frequency Tolerance ( $\Delta F$ ) (at 25°C) | ±10ppm to ±100ppm                |
| 温度频差   | Frequency Stability                          | ±10ppm to ±100ppm                |
| 工作温度范围 | Operating Temperature Range                  | -10°C ~ +60°C to -40°C ~ +85°C   |
| 储存温度范围 | Storage Temperature Range                    | -40°C ~ +85°C / -55°C ~ +125°C   |
| 老化     | Aging (25°C)                                 | ±5ppm/year Maximum               |
| 静电容    | Shunt Capacitance (C0)                       | 7pF Maximum                      |
| 激励功率   | Drive Level                                  | 100μW Typical                    |
| 绝缘阻抗   | Insulation Resistance (Rs)                   | 500 Megaohms Minimum at D.C 100V |
| 负载电容   | Load Capacitance (CL)                        | Suggested by customer            |

## •Equivalent Series Resistance and Mode of Operation 等效阻抗和振荡模式

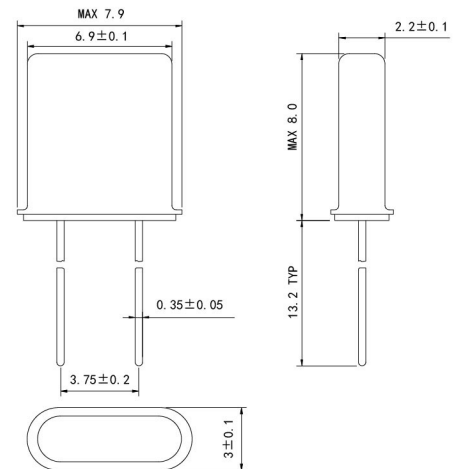
| Frequency Range 频率范围 | ESR (Ω) 等效阻抗 | Mode 振荡模式      |
|----------------------|--------------|----------------|
| 8.0000 - 10.000MHz   | 50Max        | Fundamental    |
| 10.000 - 20.000MHz   | 30Max        | Fundamental    |
| 20.000 - 50.000MHz   | 25Max        | Fundamental    |
| 40.000 - 120.00MHz   | 60Max        | Third Overtone |

GULL WING (夹持器)



## •Mechanical Dimensions 外型尺寸

TWO LEADS (两引线) UNIT (单位): mm (毫米)



THREE LEADS (三引线) UNIT (单位): mm (毫米)

