

M1 Type Crystal

Features

- M1 typical 8.0x3.2x8.0mm standard footprint.
- High stability and Long-term stability.
- Resistance welding for hermetical seal.
- Tight tolerance 10 ppm available.
- **Lead Free and RoHS compliant**



ORDERING GUIDANCE

| Product Type | Oscillation Mode | Calibration Tolerance (ppm) | Temperature Stability (ppm) | Operation Temp Range (°C) | Load Capacitance (pF) | Frequency (MHz) |
|---|---|--|--|---|------------------------------------|-----------------|
| Code: Meaning | Code: Meaning | Code: Meaning | Code: Meaning | Code: Meaning | Code: Meaning | |
| M1: UM-1 | 1: Fund 3: 3 rd OT 5: 5 th OT | A: ±10 B: ±15 C: ±20 D: ±30 F: ±50 G: ±5 H: ±25 XX: Special | 1: ±10 2: ±15 3: ±20 4: ±30 5: ±50 6: ±100 7: ±5 8: ±3 9: ±25 00: Special | A: -10~+60 B: 0~+70 C: -20~+70 D: -40~+85 E: -55~+125 F: -10~+70 G: -40~+60 H: 0~+60 I: -20~+60 J: -40~+105 K: -40~+70 L: -40~+125 | 0: Series XX: CL Value In pF | XXX.XXXXXX |
| Ordering example: M1-1C4B18-20.000000MHz UM1 Fund ±20ppm ±30ppm/0~+70°C 18pF 20.000000MHz | | | | | | |
| Note: If any other requirements are needed, they should be specified in customers' order. | | | | | | |

Electrical Specification

| | |
|---------------------------|----------------------|
| Storage Temp. Range | -55°C to +125°C |
| Drive Level(DL) | 100uW typ., 500uW |
| Shunt Capacitance(C0) | 7.0pF Max. |
| Insulation Resistance(IR) | 500MΩ Min. @ 100V DC |
| Aging | ±3ppm/year |

Equivalent Series Resistance(ESR)

| Frequency (MHz) | Mode | Max ESR (Ohms) |
|------------------|---------------------|----------------|
| 10.000 – 14.999 | Fund | 40 |
| 15.000 – 35.000 | Fund | 25 |
| 30.000 – 60.000 | 3 rd O/T | 60 |
| 60.000 – 150.000 | 5 th O/T | 100 |

