## M2 Type Crystal

## **Features**

- M2 typical 12.6x8.0x3.6mm standard footprint.
- High stability and Long-term stability.
- Resistance welding for hermetical seal.
- Tight tolerance 10 ppm available.
- Package on Tape & Reel avalible.
- Lead Free and RoHS compliant



## **ORDERING GUIDANCE**

Product Type	Oscillation Mode	Calibration Tolerance (ppm)	Temperature Stability (ppm)	Operation Temp Range (℃)	Load Capacitance (pF)	Frequency (MHz)	
Code: Meaning	Code: Meaning	Code: Meaning	Code: Meaning	Code: Meaning	Code: Meaning		
M2: UM-1 Gull-wing	1: Fund 3: 3 <sup>rd</sup> OT 5: 5 <sup>Th</sup> 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~+70 L: -40~+70 L: -40~+125	0: Series XX: CL Value In pF	XXX.XXXXXX	
Ordering example:         M2-1C4B18-20.000000MHz           UM-1 Gull-wing         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℃ to +125℃	
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 <sup>rd</sup> O/T	60
60.000 - 150.000	5 <sup>th</sup> O/T	100

