

**MHZ SMD CRYSTALS**

**MAIN FEATURE**

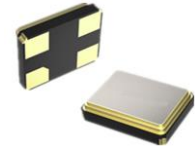
- Ultra-small SMD Package, Seam Sealed Ceramic-Metal, 4pads
- High precision & High frequency stability

**APPLICATION**

- Small Bluetooth & wireless device • IoT, Health care equipment

**RFQ**

Request For Quotation



L3.2\*W2.5\*H0.70mm

**STANDARD SPECIFICATION**

Parameter	Value			Unit	Condition
	Min.	Type	Max.		
Frequency Range	8.000		125.00	MHz	
Oscillation Mode	AT Fund.				3 <sup>RD</sup> Overtone Option
Frequency Tolerance	-	±50		ppm@25 °C	see p/n guide for more option
Operating Temp. Range	-40	-	+85	°C	see p/n guide for more option
Storage Temp. Range	-55	-	+125	°C	
Load Capacitance (CL)	-	18	-	pF	see p/n guide for more option
Frequency Stability	-	±50	-	ppm	see p/n guide for more option
Equivalent Series Resistance (ESR)			350	ohm	@8.000 ~ 10.000MHz
			100		@10.001~16.000MHz
			80		@16.001~19.000MHz
			60		@19.001~30.000MHz
			40		@30.001~54.000MHz
			100		@54.001~125.00MHz, 3 <sup>rd</sup> OT
Drive Level	-	-	100	µW	
Shunt Capacitance	-	-	7.0	pF	
Insulation Resistance	500	-		mW	DC/100V +10%
Aging per year	-	±5		ppm	@25 °C

**PART NUMBER GUIDE**

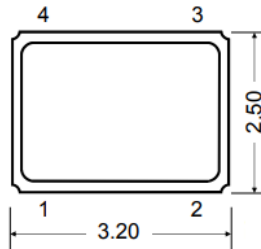
Example: CM32 24M0A50-18-50-40-60 TLF

CM32	24M0	A	50	-18	-50	-40	-60	T	LF	XX
1	2	3	4	5	6	7	8	9	10	11

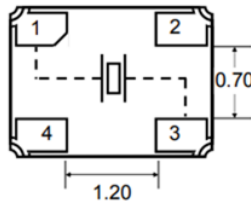
- 1) CM32: MHz SMD Crystal, 4 pads, L3.2\*W2.5\*H0.70mm
- 2) 24M0: Frequency Range 24.000MHz or specify frequency range
- 3) A: Oscillation Mode, A: AT Fund.
- 4) 50: Freq. tolerance, 50: +/-50ppm; 10: +/-10ppm; 20: +/-20ppm; 30: +/-30ppm or Specify value
- 5) 18: Load Capacitance(CL), 15: 15pF; 18: 18pF; 20: 20pF; 30: 30pF or Specify CL value
- 6) 50: Frequency Stability, 50: +/-50ppm; 10: +/-10ppm; 20: +/-20ppm; 30: +/-30ppm or Specify value
- 7) 40: Operating Temp. Range, 40: -40°C ~+85°C; 10: -10°C ~+60°C; 20: -20°C ~+70°C; or Specify value
- 8) 60: Equivalent Series Resistance (ESR), 60: 60 ohm Max.
- 9) T: Package in Tape/Reel, 3000pcs/Reel
- 10) LF: RoHS Compliant
- 11) XX: Internal Control Code, 2 letter or digits; Blank: N/A

**DIMENSION (Unit: mm)**

**Top View**

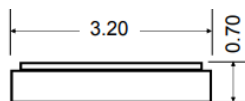


**Bottom View**



Connection  
#1 Crystal  
#2 Ground  
#3 Crystal  
#4 Ground

**Side View**



**Solder Pattern**

