

**MHZ SMD CRYSTALS**

**MAIN FEATURE**

- Low cost and short lead time • Wide Frequency Range

**RFQ**

Request For Quotation



**APPLICATION**

- PC, TV and all kind of consumer electronics products



L11.5\*W4.75\*H4.0mm

**STANDARD SPECIFICATION**

Parameter	Value			Unit	Condition
	Min.	Type	Max.		
Frequency Range	3.000		150.00	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)			150	ohm	@3.000 ~ 4.000MHz
			120		@4.001 ~ 6.000MHz
			80		@6.001 ~ 10.000MHz
			60		@10.001 ~ 54.000MHz
			80		@30.001 ~ 40.000MHz, 3 <sup>rd</sup> OT
			70		@40.001 ~ 150.00MHz, 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**

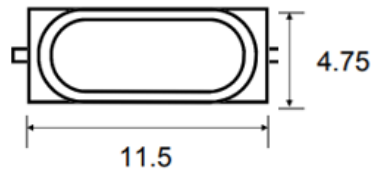
Example: CSM2 4M0A50-18-50-40-150 TLF

CSM2	4M0	A	50	-18	-50	-40	-150	T	LF	XX
1	2	3	4	5	6	7	8	9	10	11

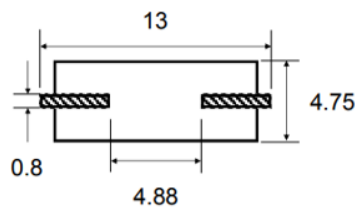
- 1) CSM2: MHz SMD Crystal, 2 pads, L11.5\*W4.75\*H4.0mm
- 2) 4M0: Frequency Range 4.000MHz or specify frequency range
- 3) A: Oscillation Mode, A: AT Fund.
- 4) 50: Freq. tolerance, 50: +/-50ppm; 10: +/-10ppm; 20: +/-20ppm; 30: +/-30ppm or Specify value
- 5) 18: Load Capacitance(CL), 15: 15pF; 18: 18pF; 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) 150: Equivalent Series Resistance (ESR), 150: 150 ohm Max.
- 9) T: Package in Tape/Reel, 1000pcs/Reel
- 10) LF: RoHS Compliant
- 11) XX: Intenal Control Code, 2 letter or digits; Blank: N/A

DIMENSION (Unit: mm, Tol.: +/-0.2mm)

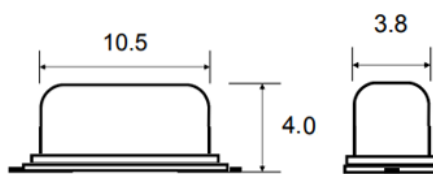
**Top View**



**Bottom View**



**Side View**



**Solder Pattern**

