CMC208-SERIES

RoHS Compliant

- **Ultra Low power: < 1µA**
- **Fixed 32.768 kHz**
- **No Supply Voltage external bypass capacitors required**
- **XTAL replacement in 2.0 mm x 1.2 mm SMD**
- **SMD package 2.0 x 1.2 mm**

ELECTRICAL SPECIFICATIONS

PARAMETER	SYMBOL	CONDITION	VALUE			UNIT
			Min.	Typ.	Max.	
Frequency nominal	f_0			32.768		kHz
Supply Voltage	Vs	T_a = -10°C to +70°C T_a = -40°C to +85°C	1.2 1.5		3.63 3.63	V V
Core Supply Current	Is	Vs = 1.8V, no load condition, T_a = 25°C Vs = 3.63V max, T_a = -10°C to +70°C no load condition Vs = 3.63V max, T_a = -40°C to +85°C no load condition Is does not include output stage current or load. To derive total operating current(no load) ,add Is+(0.065µA)(peak to peak output Voltage swing)		0.9	 1.3 1.4	µA µA µA
Output Stage Supply Current	Is_{0ut}	Vs = 1.5V~3.63V max, T_a = -40°C to +85°C,no load condition		0.065	0.125	µA/Vpp
Operating Temperature	T_a	Commercial Industrial	-10 -40		+70 +85	°C °C
Frequency Tolerance	$\Delta f/f_0$	After two reflows, at 25°C Vs=1.5V ~ 3.63V			20	ppm
Frequency Stability	$\Delta f/f_0$	T_a = -10°C to +70°C, Vs=1.5~3.63V T_a = -40°C to +85°C, Vs=1.5~3.63V T_a = -10°C to +70°C, Vs=1.2~1.5V Measured peak to peak, inclusive of initial tolerance at 25°C, variations over operating temperature range, rated supply voltage and load			75 100 250	ppm ppm ppm
Power supply Ramp		T_a = -40°C to +85°C, 0 to 90% Vs			100	ms
Start-up Time	T_{START}	T_a = -40°C ≤ T_a ≤ +50°C, valid output T_a = 50°C ≤ T_a ≤ +85°C, valid output		180	300 450	ms ms

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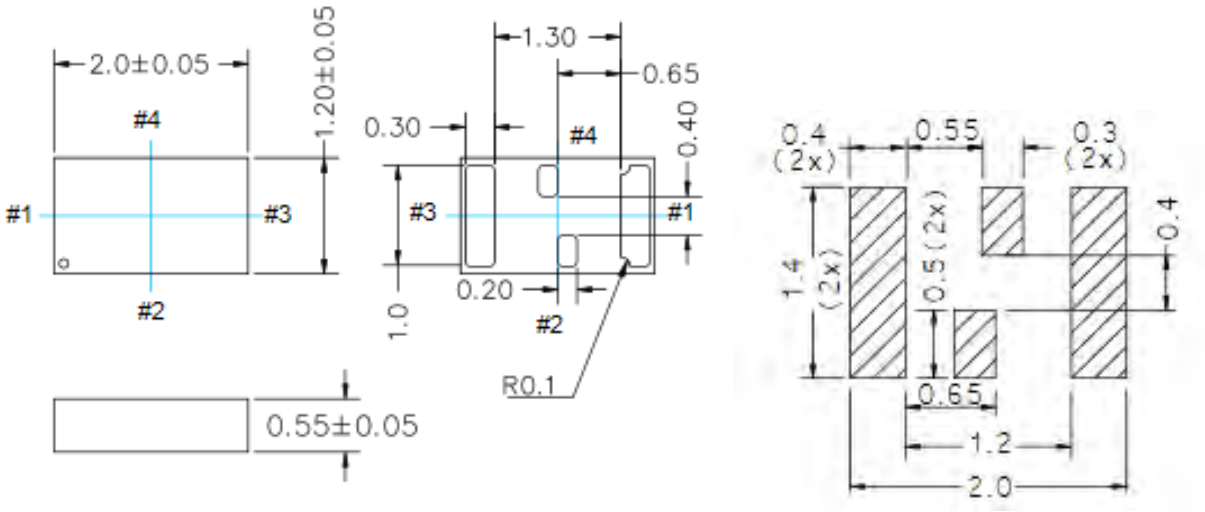
MECHANICAL DIMENSIONS AND PIN FUNCTIONING



PIN	SYMBOL	FUNCTION
1	NC	No connect. This pin will not respond to any input signal. It can be left floating
2	GND	Electrical Ground
3	OUTPUT	Output Signal [1]
4	Vs	Supply Voltage [2]