CMC301-SERIES

RoHS Compliant

- **Low Power Oscillator**
- **HCMOS/ LVCMOS output**
- **SMD package 3.2 x 2.5 mm**

ELECTRICAL SPECIFICATIONS

PARAMETER	SYMBOL	CONDITION	VALUE			UNIT
			Min.	Typ.	Max.	
Frequency Range	f_0	Any Frequency between Frequency range, accurate to 6 decimal places	1.0		110.0	MHz
Supply Voltage	Vs		1.8		3.3	V
Supply Current	Is	Vs = 1.8V, f_0=20MHz, no load Vs = 2.5V, f_0=20MHz, no load Vs = 2.8V, f_0=20MHz, no load Vs = 3.3V, f_0=20MHz, no load		3.5 3.7 3.8 3.8	4.1 4.2 4.5 4.5	mA mA mA mA
Operating Temperature	T_a		-20 -40		+70 +85	°C °C
Frequency Stability	$\Delta f/f_0$	Including First Year aging, initial frequency tolerance at 25°C, Frequency stability over temperature range, supply variation, load variation	-20 -25 -50		+20 +25 +50	ppm ppm ppm
Enable / Disable/ Standby Function	E/D/St	Enable = Open or"1"(V_{IH}≥0.75Vs) (output signal active) Disable = GND or "0"(V_{IL}<0.25Vs) (output high impedance, oscillator operates) Standby = GND or "0" V_{IL}<0.25Vs) (output weakly pulled down, oscillator sleep mode)	0.75Vs		0.25Vs 0.25Vs	V V V
Enable / Disable Time	$T_{E/D}$	f_0=110MHz			130	ms
Enable / Disable Current	$I_{E/D}$	Vs=1.8V, E/D =GND Vs=2.5V to 3.3V, E/D =GND Output in high impedance state			4.0 4.2	mA mA
Standby Current	Istby	STBY=GND,Vs=1.8V STBY=GND,Vs=2.5V STBY=GND,Vs=2.8V to 3.3V Output is weakly pulled down		0.2 1.1 2.1	1.3 2.5 4.3	µA µA µA
Startup Time	T_{ST}				5	ms
RMS Phase Jitter	J_{PH}	f_0=75MHz,BW 900KHz to 7.5MHz f_0=75MHz,BW 12KHz to 20MHz		0.5 1.3	0.9 2.0	ps ps
RMS Period Jitter	J_P	f_0=75MHz		1.8	3	ps
Peak to Peak Period Jitter	J_{PK-PK}	f_0=75MHz,Vs=2.5 to 3.3V f_0=75MHz, Vs=1.8V		12 14	25 30	ps ps

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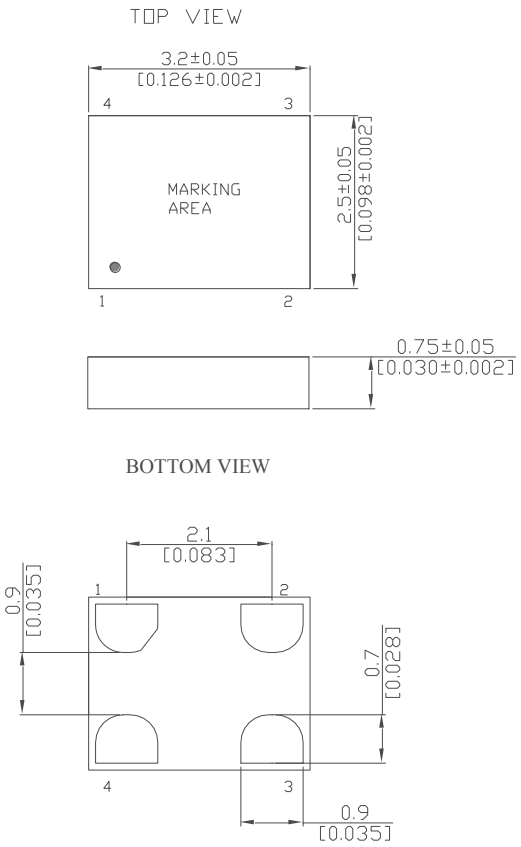
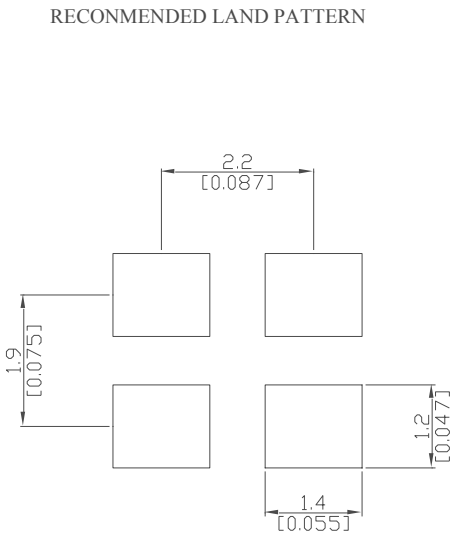
MECHANICAL DIMENSIONS AND PIN FUNCTIONING





PIN	SYMBOL	FUNCTION
1	E/D/STBY/N	H :Enable output frequency L:Disable output frequency , high impedance In E/D or STBY mode connect a pull-up resistor of 10kΩ to pin 1, in case not externally driven. In case pin1 is left floating, use N option
2	GND	Electrical Ground
3	OUTPUT	Output Signal
4	Vs	Supply Voltage