

MEMS Differential Programmable Oscillator

Page 1 of 8

CMP701-SERIES



- 1 to 220 MHz High Performance
- LVPECL/ HCSL / LVDS / CML output
- High frequency stability
- SMD package 7.0 x 5.0 mm

ELECTRICAL SPECIFICATIONS

PARAMETER	SYMBOL	CONDITION	VALUE		UNIT	
			Min.	Тур.	Max.	
Frequency Range	f_0		1.0		220	MHz
Supply Voltage	Vs	Vs=+1.8V±5% is only for CML	1.8		3.3	V
Operating Temperature	Та		0 -20 -40		+70 +70 +85	ိ
Frequency Stability	$\Delta \mathrm{f}/\mathrm{f}_0$	Including First Year aging, initial frequency tolerance at 25°C, Frequency stability over temperature range, supply variation, load variation	-10 -15 -20 -25 -50		+10 +15 +20 +25 +50	ppm ppm ppm ppm ppm
Enable / Disable/ Standby Function Pin1	E/D/STBY	Enable = High or open (OUT+ and OUT- output signals active) Disable = Low or GND (OUT+ and OUT- outputs high impedance) Standby= High or open (OUT+ and OUT- output signals active) Standby = Low or GND (OUT+ and OUT- output is low, weak pulled down, oscillator stops)				
Input High Voltage	VIH		70%Vs			V
Input Low Voltage	VIL				30%Vs	V
Input High current	lін	E/D or STBY pin			10	μΑ
Input Low current	lıL	E/D or STBY pin	-10			μΑ
Power up Time	Tpw	Time from minimum power supply voltage to the first cycle			10	ms
Long Term Stability (Aging)	$\Delta f_0/\Delta t$	Ta=25°C, first year	-1		1	ppm

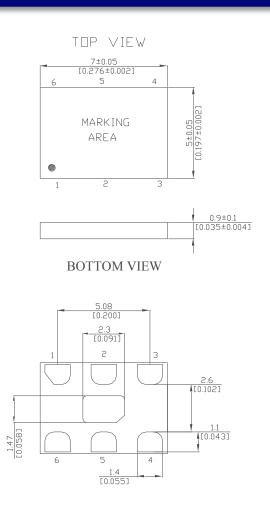


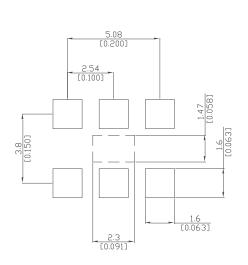
MEMS Differential Programmable Oscillator

Page 6 of 8

CMP701-SERIES

MECHANICAL DIMENSIONS AND PIN FUNCTIONING





RECONMENDED LAND PATTERN

PIN	SYMBOL	FUNCTION	
1	E/D/STBY	E/D : High or open, OUT+ and OUT- active Low , OUT+ and OUT- High impedance state STBY: High or open, OUT+ and OUT- active Low , OUT+ and OUT- is low (weak pull down), oscillator stops	
2	NC	Do not connect pin, leave it floating	
3	GND	Electrical Ground	
4	OUT+	Output Signal	
5	OUT-	Complementary Output Signal	
6	Vs	Supply Voltage	

Note: Connect a capacitor of 0.1 µ