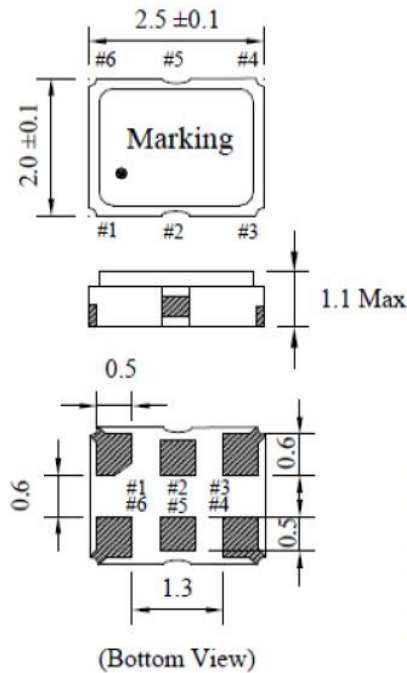


■ ELECTRICAL SPECIFICATION

PARAMETER		VALUE
Frequency Range		13.500 ~ 69.500 MHz
Operating Temperature Range		-20°C ~ +70°C Standard -40°C ~ +85°C X -40°C ~ +125°C X1
Frequency Stability		±20 ppm, ±25 ppm, ±30 ppm, ±50 ppm, ±100ppm
Aging, 1 st Year		±3 ppm max
Storage Temperature Range		-55°C to +125°C
Supply Voltage (Vcc)		2.5 V, 3.3 V
Supply Current		60 mA max
Output LVPECL	Symmetry	45% to 55% at 50% Wave form
	Rise / Fall Time	0.5 ns max at 20% to 80% Vdd
	Logic "0" Level	V _{OH} =Vcc-1.025 min
	Logic "1" Level	V _{OL} =Vcc-1.62 max
	Load	50 Ω (to V _{CC} -2 V)
Enable / Disable Function		Pin 1: High or Open / Output enabled (Pins 4 & 5) Pin 1: Low / Output disabled (High impedance)
Output Swing		0.40 V min
Stand By Current		10 μA max
Start up Time		10 ms max
Output Enable Time		10 ms max
Output Disable Time		0.2 μs max
Phase Noise	@50MHz 3.3V	-159.8 dBc/Hz, Typical @ 100kHz offset
RMS Phase Jitter (12kHz ~ 20 MHz)		101.856 fs typ

■ **MECHANICAL SPECIFICATION**



Pin Connections
1 : $\overline{\text{INH}}$
2 : Nc
3 : Gnd
4 : Output
5 : Complementary Output
6 : V_{dd}

$\overline{\text{INH}}$ Function	
#1	#4, #5(Output)
Open	Active
"H"Level	Active
"L"Level	High Z(Oscillation Stopped)

■ **PART NUMBERING SYSTEM**

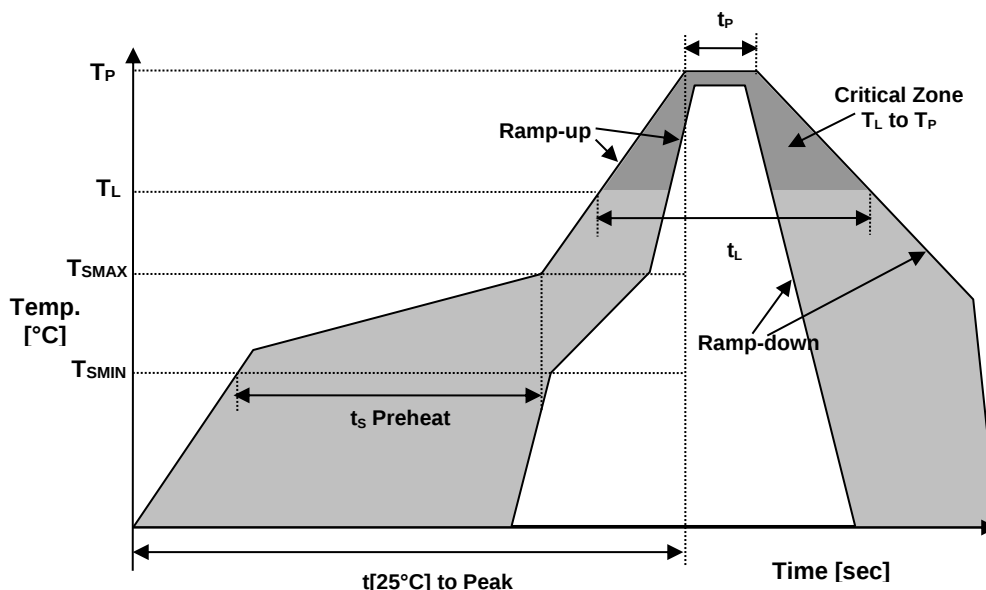
TYPE	SERIES	-	FREQUENCY (MHz)	-	SUPPLY VOLTAGE (V _{cc})	-	STABILITY (ppm)	-	TEMPERATURE RANGE (°C)	-	SYMMETRY (Duty Cycle)	-	TAPE & REEL
Clock Oscillator CPF	2520	-	13.500 ~ 69.500 MHz	-	* 2.5: V _{cc} =2.5 3.3: V _{cc} =3.3	-	20: ±20 ppm 25: ±25 ppm 30: ±30 ppm 50: ±50 ppm 100: ±100 ppm	-	blank: -20°C to +70°C X: -40°C to +85°C X1: -40°C to +105°C	-	T: 45 to 55%	-	TR

*Other ranges available. Please contact factory.

EXAMPLE: CPF2520-40.000-3.3-25-X-T-TR

Surface Mount CPF2520 LVPECL Oscillator, 2.5 x 2.0 mm, 40.000 MHz, 3.3 VDC Supply Voltage, ±25 ppm Stability from -40°C to +85°C, Symmetry 45% to 55%, Tape and Reel Packaging.

■ REFLOW PROFILE



Reflow profile		
Temperature Min Preheat	$T_{S\text{MIN}}$	150°C
Temperature Max Preheat	$T_{S\text{MAX}}$	200°C
Time ($T_{S\text{MIN}}$ to $T_{S\text{MAX}}$)	t_S	60-180 sec.
Temperature	T_L	217°C
Peak Temperature	T_P	260°C
Ramp-up rate	R_{UP}	3°C/sec max.
Ramp-down rate	R_{DOWN}	6°C/sec max.
Time within 5°C of Peak Temperature	t_P	10 sec.
Time $t[25^\circ\text{C}]$ to Peak Temperature	$t[25^\circ\text{C}]$ to Peak	480 sec.
Time	t_L	60-150 sec.

■ ENVIRONMENTAL

PARAMETER	VALUE
MOISTURE SENSITIVITY LEVEL	1
REACH SVHC	COMPLIANT
RoHS	COMPLIANT
TERMINATION FINISH	Au

