

CO2520 SERIES: 2.5 x 2.0 mm CLOCK OSCILLATOR

■ FEATURES

- ULTRA SMALL PACKAGE
- LOW SUPPLY VOLTAGE 1.8 AVAILABLE
- STANDBY FUNCTION

■ APPLICATIONS

- PRINTER SCANNER
- VGA CARD
- DVD
- DSC, DVC



■ ELECTRICAL SPECIFICATION

PARAMETER		VALUE			
Frequency Range		0.750 ~ 75.000 MHz			
Frequency Stability ¹ *		±25 ppm, ±30 ppm, ±50 ppm, ±100 ppm			
Supply Voltage (Vcc)		1.6 ~ 3.6 V			
Supply Current		1.8V ±5%	2.5V ±5%	3.0V ±5%	3.3V ±5%
		2.5 mA max ~29 MHz	4.5 mA max ~29 MHz	5.5 mA max ~29 MHz	2.5 mA max ~29 MHz
		3.0 mA max ~39 MHz	5.5 mA max ~39 MHz	6.5 mA max ~39 MHz	3.5 mA max ~39 MHz
		3.5 mA max ~50 MHz	6.5 mA max ~50 MHz	7.5 mA max ~50 MHz	4.5 mA max ~50 MHz
		4.0 mA max ~75MHz	7.5 mA max ~75MHz	8.5 mA max ~75MHz	5.5 mA max ~75MHz
Output CMOS	Symmetry @50% Vdd	40% to 60% Standard 45% to 55% Tight			
	Rise / Fall Time	10 ns max at 10% to 90% Vdd			
	Logic "0" Level	Vcc x 0.1 V max			
	Logic "1" Level	Vcc x 0.9 V min			
	Load	15 pF max			
Enable / Disable Function		Pin 1: High or Open >> Output enabled Pin 3 Pin 1: Low >> Output disabled (High impedance)			
Start-up Time		10 ms max			
Phase Jitter (12 kHz ~ 5 MHz)		1 ps max			
Standby Current		10µA max			
Operating Temperature Range		-20°C ~ +70°C Standard			
		-40°C ~ +85°C Extended			
Storage Temperature Range		-55°C ~ +125°C			

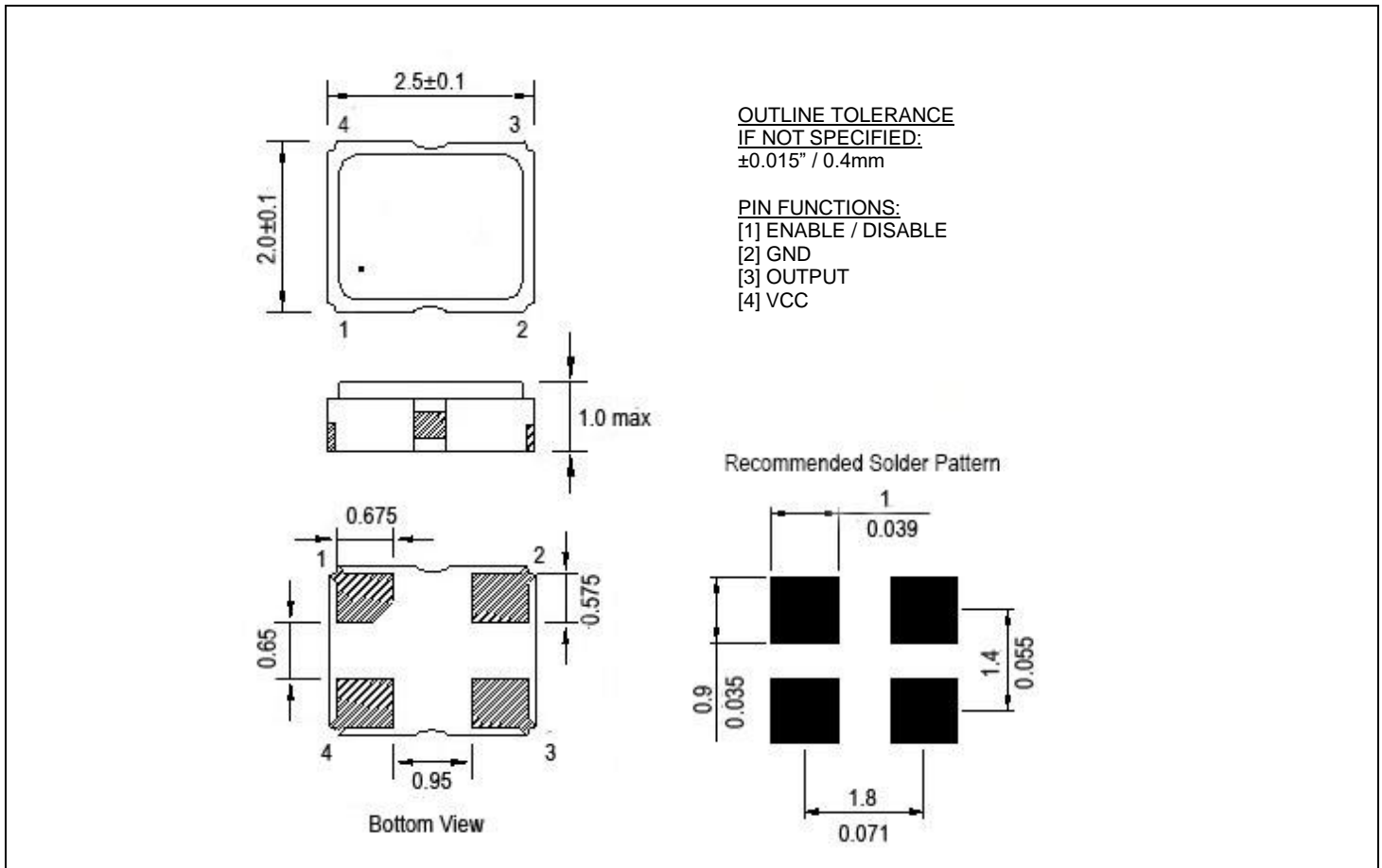
* Inclusive of 25°C tolerance, operating temperature range, voltage or load changes, aging, reflow consult factory for tighter stability options.

NOTES

¹ Not available at all frequencies, Contact Factory

CO2520 SERIES: 2.5 x 2.0 mm CLOCK OSCILLATOR

MECHANICAL SPECIFICATION (4 pin ceramic package)



PART NUMBERING SYSTEM

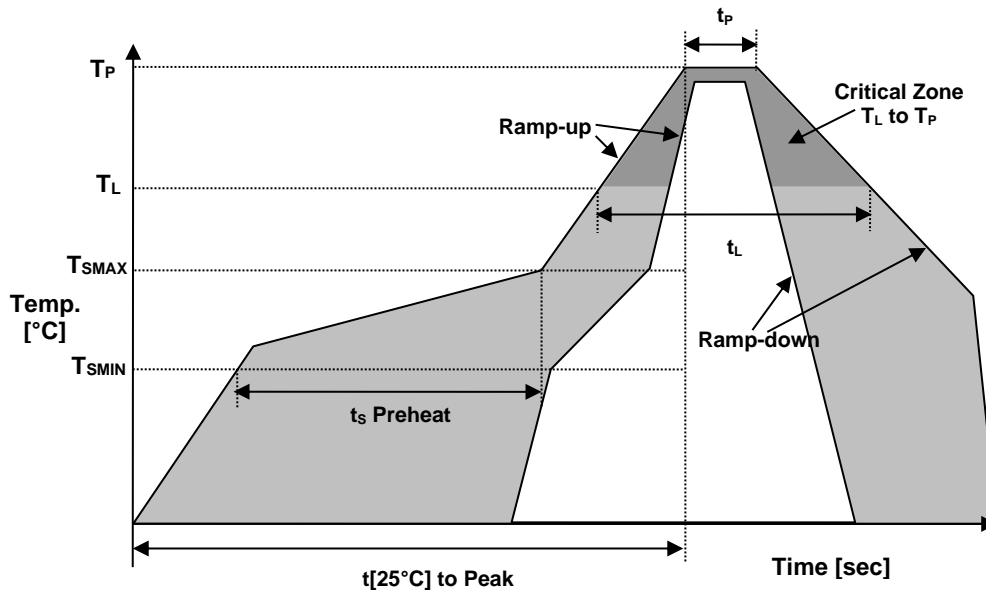
TYPE	SERIES	FREQUENCY (MHz)	SUPPLY VOLTAGE (Vcc)	STABILITY (PPM)	TEMPERATURE RANGE	SYMMETRY (Duty Cycle)	TAPE & REEL
Clock Oscillator	2520	0.750 ~ 75.000	1.8: Vcc=1.8 2.5: Vcc=2.5 3.0: Vcc=3.0 3.3: Vcc=3.3 P: Vcc=1.6~3.63	25: ±25 30: ±30 50: ±50 100: ±100	blank: -20°C ~ +70°C X: -40°C ~ +85°C	blank: 40 ~ 60% T: 45 ~ 55%	TR

EXAMPLE: CO2520-12.800-2.5-50-X-T-TR

Surface Mount CO2520, 2.5 x 2.0 mm, 12.800 MHz, 2.5 VDC Supply Voltage, ±50 ppm Overall Stability, from -40°C to +85°C, Symmetry 45% to 55%, Tape and reel packaging.

CO2520 SERIES: 2.5 x 2.0 mm CLOCK OSCILLATOR

REFLOW PROFILE



Reflow profile		
Temperature Min Preheat	T _{SMIN}	150°C
Temperature Max Preheat	T _{SMAX}	200°C
Time (T _{SMIN} to T _{SMAX})	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°C] to Peak Temperature	t[25°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

