

Crystal Oscillator

Series **CPW**

- Factory Programmable
- Standard Package Options
- Also available in 1.8 V



Part Numbering Example: **CPW C3 L Z – A7 B6 - XX.XXXX TS**

CPW	C	7	L	Z	A7	B6	XX.XXXX	TS
SERIES	OUTPUT	PACKAGE STYLE	VOLTAGE	ADDED FEATURES	OPERATING TEMP	STABILITY	FREQUENCY	TRI-STATE
CPW	C=CMOS	3=3.2x2.5 Ceramic	L=3.3V R=2.5V Q=1.8V	Blank=Bulk T=Tube Z=Tape and Reel	A7=-40°C+85°C	B6=±100ppm BP=±50ppm	1.000~166.000 MHz	TS=Tri-State PD=PowrDwn

Specifications:

Description	Min	Typ	Max	Unit
Frequency Range: Programmable to Any Discrete Frequency	1.0		166.0	MHz
Available Stability Options:	-100		100	ppm
	-50		50	ppm
	-25		25	ppm
Programmable Supply Voltage: (1-166 MHz)	3.0	3.3	3.6	V
(1-166 MHz)	2.2	2.5	2.8	V
(1-166 MHz)	1.6	1.8	2.0	V
Operating Temperature Range:	-40		+85	°C
Storage Temperature:	-55		+125	°C
Aging (PPM/Year) Ta=25C, Vdd=3.3V			±5	

Operating Conditions:

Description	Min	Max	Unit
Vdd Supply Voltage	1.6	3.6	V
C _{CMOS} Max Capacitive Load on outputs for CMOS levels		15	pF

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ELECTRICAL CHARACTERISTICS

Description	TEST CONDITIONS	Min	Typ	Max	Unit
Input Characteristics (Pin 1): V _{IL} , Low-Level Input Voltage TO DISABLE OUTPUT				0.2V _{dd}	V
V _{IH} , High-Level Input Voltage TO ENABLE OUTPUT or OPEN		0.8V _{dd}			V
I _{IL} , Input Low Current I _{IH} , Input High Current	V _{IN} = 0V V _{IN} = V _{dd}			10 10	μA μA
Output Characteristics: V _{OL} , Low-Level Output Voltage	1.8V-2.5V V _{dd} , 4mA I _{oL} 3.0V-3.6V V _{dd} , 8 mA I _{oL}			0.1V _{dd} 0.4	V V
V _{OHCMOS} , High-level CMOS Voltage	1.8V-2.5V V _{dd} , 4mA I _{oL} 3.0V-3.6V V _{dd} , -8 mA I _{oL}	0.9 V _{dd} V _{dd} -0.4			V V
Power Supply Current: (unloaded)	1 MHz ≤ f ₀ ≤ 25 MHz	3.5		4.0	mA
	25 MHz < f ₀ ≤ 50 MHz	5.0		6.5	mA
	50 MHz < f ₀ ≤ 75 MHz	6.0		8.5	mA
	75 MHz < f ₀ ≤ 100 MHz	7.0		10.5	mA
	100 MHz < f ₀ ≤ 125 MHz	8.5		12.5	mA
	125 MHz < f ₀ ≤ 166 MHz	10.0		15.0	mA
Standby Current:			10	50	uA
Pull-Up (Pin 1)	3.0 – 3.6 V _{dd} , V _{IN} = 0V 3.0 – 3.6 V _{dd} , V _{IN} = 0.7V	1.0 50	3.0 100	6.0 200	MΩ KΩ
Tri-State Leakage Current	3.3 V _{dd}			50	μA
Output Enable Mode:	Output is Tri-Stated				
Power Down Mode:	Output is Tri-Stated.				



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