ECS INC. INTERNATIONAL

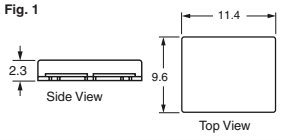
VC-TCXO and VCXO Oscillators

Digi-Reel®

Fig.	Frequency (MHz)	Supply Voltage	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Tape and Reel† Qty.	Pricing	ECS Part No.
			VC-TCXOs, -40°C ~ 85°C, ±2.5ppm						
1	10.00	3.0	X493CT-ND	15.13	12.38	11.00	500	4950.00	VC-TXO-39SM-100-TR
	13.00	3.0	X490CT-ND	15.13	12.38	11.00	500	4950.00	VC-TXO-39SM-130-TR
	16.80	3.0	X491CT-ND	15.13	12.38	11.00	500	4950.00	VC-TXO-39SM-168-TR
	19.44	3.0	X492CT-ND	15.13	12.38	11.00	500	4950.00	VC-TXO-39SM-194.4-TR
	10.00	3.0	X1126CT-ND◆	15.13	12.38	11.00	500	4950.00	VC-TXO-39SMX-100-TR
	12.80	3.0	X1127CT-ND◆	15.13	12.38	11.00	500	4950.00	VC-TXO-39SMX-128-TR
	13.00	3.0	X1128CT-ND◆	15.13	12.38	11.00	500	4950.00	VC-TXO-39SMX-130-TR
	16.80	3.0	X1129CT-ND◆	15.13	12.38	11.00	500	4950.00	VC-TXO-39SMX-168-TR
	19.44	3.0	X1130CT-ND◆	15.13	12.38	11.00	500	4950.00	VC-TXO-39SMX-194.4-TR
2	12.00	3.0	XC1018CT-ND◆	17.85	16.07	13.39	500	5355.00	VC-TXO-35SM-120-B-TR
	12.80	3.0	XC348CT-ND◆	14.85	13.37	11.14	1,000	7425.00	VC-TXO-35SM-128-B-TR
	13.00	3.0	XC1019CT-ND◆	17.85	16.07	13.39	1,000	8925.00	VC-TXO-35SM-130-B-TR
	14.40	3.0	XC1020CT-ND◆	17.85	16.07	13.39	500	5355.00	VC-TXO-35SM-144-B-TR
	16.80	3.0	XC349CT-ND◆	14.85	13.37	11.14	1,000	7425.00	VC-TXO-35SM-168-B-TR
	19.20	3.0	XC1021CT-ND◆	17.85	16.07	13.39	500	5355.00	VC-TXO-35SM-192-B-TR
	19.44	3.0	XC350CT-ND◆	14.85	13.37	11.14	1,000	7425.00	VC-TXO-35SM-194-B-TR
3	10.00	3.0	XC1618CT-ND◆	9.57	8.62	7.18	1,000	4785.00	VC-TXO-23SM-100-B
	19.20	3.0	XC1462CT-ND◆	6.57	5.92	4.93	1,000	3285.00	VC-TXO-23SM-192-B
	19.68	3.0	XC1463CT-ND◆	6.57	5.92	4.93	1,000	3285.00	VC-TXO-23SM-196.8-B
	20.00	3.0	XC1464CT-ND◆	6.57	5.92	4.93	1,000	3285.00	VC-TXO-23SM-200-B
	26.00	3.0	XC1465CT-ND◆	6.57	5.92	4.93	1,000	3285.00	VC-TXO-23SM-260-B
			VCXOs, -40°C ~ 85°C, ±50ppm — RoHS Compliant						
4	19.44	3.3	XC1110CT-ND	3.87	3.49	2.91	1,000	1935.00	ECS-VXO-73-19.440-TR
	27.00	3.3	XC1112CT-ND	3.87	3.49	2.91	1,000	1935.00	ECS-VXO-73-27.00-TR
	32.77	3.3	XC1113CT-ND	3.87	3.49	2.91	1,000	1935.00	ECS-VXO-73-32.768-TR
	40.00	3.3	XC1115CT-ND	4.77	4.30	3.58	1,000	2385.00	ECS-VXO-73-40.00-TR
5	27.00	2.8	XC1487CT-ND	27.63	24.87	20.73	500	6907.50	ECS-2532VXO-270B-2.8
	54.00	2.8	XC1488CT-ND	27.63	24.87	20.73	500	6907.50	ECS-2532VXO-540B-2.8

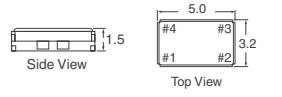
◆ ***RoHS Compliant*** † For Tape and Reel part number, change CT-ND to TR-ND.

Fig. 1



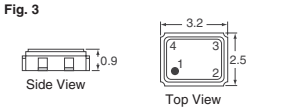
Pin Connection	
1	Vcontrol
2	GND
3	Output
4	Vcc

Fig. 2



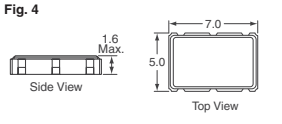
Pin Connection	
1	Vcontrol
2	GND
3	Output
4	Vcc

Fig. 3



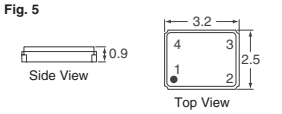
Pin Connection	
1	Vcontrol
2	GND
3	Output
4	VDC

Fig. 4



Pin Connection	
1	V Control
2	Tri-State
3	Ground
4	Output
5	NC
6	Vcc

Fig. 5

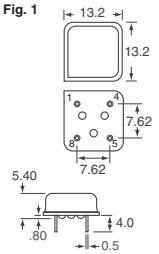


Pin Connection	
1	Vcontrol
2	GND
3	Output
4	VDD

D

Thru-Hole Oscillators

Fig. 1



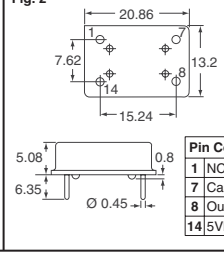
A

Pin Connection	
1	Tri-State
4	Case Ground
5	Output
8	5VDC

B

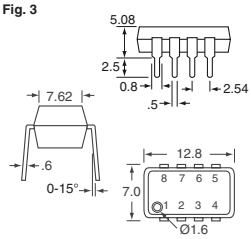
Pin Connection	
1	NC
4	Ground
5	Output
8	5VDC

Fig. 2



Pin Connection	
1	NC
7	Case Ground
8	Output
14	5VDC

Fig. 3



Pin Connection	
1	Output
2	Dividing Ratio
3	Standby
4	GND
5	A (Programming)
6	B (Programming)
7	C (Programming)
8	VDD (5V)

SETTING OF DIVIDING OUTPUT						
Input Select				Output		
C	B	A	ST	F (Original Frequency)	D (Divided Waveform)	
X	X	X	L	L	L	
L	L	L	H	fo clock	fo 1/2 clock	
L	L	H	H	fo clock	fo $1/2^2$clock	
L	H	L	H	fo clock	fo $1/2^3$clock	
L	H	H	H	fo clock	fo $1/2^4$clock	
H	L	L	H	fo clock	fo $1/2^5$clock	
H	L	H	H	fo clock	fo $1/2^6$clock	
H	H	L	H	fo clock	fo $1/2^7$clock	
H	H	H	H	fo clock	fo $1/2^8$clock	

Fig.	Frequency (MHz)	Digi-Key Part No.	Price Each 1	10	100	500	ECS Part No.
		ECS-2200B Half Size Oscillators, 5.0V, 0°C ~ 70°C, ±50ppm					
1A	4.00000	XC259-ND	2.63	2.37	1.89	1.68	ECS-2200B-040
	4.91520	XC260-ND	2.63	2.37	1.89	1.68	ECS-2200B-049
	6.00000	XC261-ND	2.63	2.37	1.89	1.68	ECS-2200B-060
	6.14400	XC262-ND	2.63	2.37	1.89	1.68	ECS-2200B-061
	7.37280	XC263-ND	2.63	2.37	1.89	1.68	ECS-2200B-073
	8.00000	XC264-ND	2.63	2.37	1.89	1.68	ECS-2200B-080
	9.21600	XC265-ND	2.63	2.37	1.89	1.68	ECS-2200B-092.1
	9.83040	XC266-ND	2.63	2.37	1.89	1.68	ECS-2200B-098
	10.00000	XC267-ND	2.63	2.37	1.89	1.68	ECS-2200B-100
	11.05920	XC268-ND	2.63	2.37	1.89	1.68	ECS-2200B-110.5
	12.00000	XC269-ND	2.63	2.37	1.89	1.68	ECS-2200B-120
	14.31818	XC270-ND	2.63	2.37	1.89	1.68	ECS-2200B-143
	16.00000	XC271-ND	2.63	2.37	1.89	1.68	ECS-2200B-160
	18.43200	XC272-ND	2.63	2.37	1.89	1.68	ECS-2200B-184
	19.66080	XC273-ND	2.63	2.37	1.89	1.68	ECS-2200B-196
	20.00000	XC274-ND	2.63	2.37	1.89	1.68	ECS-2200B-200
	24.00000	XC275-ND	2.63	2.37	1.89	1.68	ECS-2200B-240
	25.00000	XC276-ND	2.63	2.37	1.89	1.68	ECS-2200B-250
	28.32200	XC277-ND	2.63	2.37	1.89	1.68	ECS-2200B-283
	32.00000	XC278-ND	2.63	2.37	1.89	1.68	ECS-2200B-320
	40.00000	XC279-ND	2.63	2.37	1.89	1.68	ECS-2200B-400
	48.00000	XC280-ND	2.63	2.37	1.89	1.68	ECS-2200B-480
	50.00000	XC281-ND	2.63	2.37	1.89	1.68	ECS-2200B-500
	66.66600	XC282-ND	2.63	2.37	1.89	1.68	ECS-2200B-666
	80.00000	XC283-ND	2.63	2.37	1.89	1.68	ECS-2200B-800
		ECS-2200BX Half Size Oscillators, 5.0V, 0°C ~ 70°C, ±50ppm — RoHS Compliant					
1A	4.00000	XC1178-ND	2.63	2.37	1.89	1.68	ECS-2200BX-040
	4.91520	XC1179-ND	2.63	2.37	1.89	1.68	ECS-2200BX-049
	6.00000	XC1180-ND	2.63	2.37	1.89	1.68	ECS-2200BX-060
	7.37280	XC1181-ND	2.63	2.37	1.89	1.68	ECS-2200BX-073
	8.00000	XC1182-ND	2.63	2.37	1.89	1.68	ECS-2200BX-080
	9.83040	XC1183-ND	2.63	2.37	1.89	1.68	ECS-2200BX-098
	10.00000	XC1184-ND	2.63	2.37	1.89	1.68	ECS-2200BX-100
	11.05920	XC1185-ND	2.63	2.37	1.89	1.68	ECS-2200BX-110.5
	16.00000	XC1186-ND	2.63	2.37	1.89	1.68	ECS-2200BX-160
	19.66080	XC1187-ND	2.63	2.37	1.89	1.68	ECS-2200BX-196
1A	20.00000	XC1188-ND	2.63	2.37	1.89	1.68	ECS-2200BX-200
	24.00000	XC1189-ND	2.63	2.37	1.89	1.68	ECS-2200BX-240
	32.00000	XC1190-ND	2.63	2.37	1.89	1.68	ECS-2200BX-320
	40.00000	XC1191-ND	2.63	2.37	1.89	1.68	ECS-2200BX-400
	48.00000	XC1192-ND	2.63	2.37	1.89	1.68	ECS-2200BX-480
	50.00000	XC1193-ND	2.63	2.37	1.89	1.68	ECS-2200BX-500
	80.00000	XC1194-ND	2.63	2.37	1.89	1.68	ECS-2200BX-800
		ECS-2100A Half Size Oscillators, 5.0V, 0°C ~ 70°C, ±100ppm					
1B	1.000000	XC229-ND	2.13	1.92	1.53	1.36	ECS-2100A-010
	1.228800	XC230-ND	2.13	1.92	1.53	1.36	ECS-2100A-012.2
	1.843200	XC231-ND	2.13	1.92	1.53	1.36	ECS-2100A-018
	2.000000	XC232-ND	2.13	1.92	1.53	1.36	ECS-2100A-020
	2.457600	XC233-ND	2.13	1.92	1.53	1.36	ECS-2100A-024
	3.579545	XC235-ND	2.13	1.92	1.53	1.36	ECS-2100A-035
	3.686400	XC234-ND	2.13	1.92	1.53	1.36	ECS-2100A-036
	4.000000	X202-ND	2.13	1.92	1.53	1.36	ECS-2100A-040
	4.915200	XC236-ND	2.13	1.92	1.53	1.36	ECS-2100A-049
	5.000000	XC237-ND	2.13	1.92	1.53	1.36	ECS-2100A-050
	5.068800	XC238-ND	2.13	1.92	1.53	1.36	ECS-2100A-051
	6.000000	XC239-ND	2.13	1.92	1.53	1.36	ECS-2100A-060
	6.144000	XC240-ND	2.13	1.92	1.53	1.36	ECS-2100A-061
	7.372800	X208-ND	2.13	1.92	1.53	1.36	ECS-2100A-073.2
	8.000000	X209-ND	2.13	1.92	1.53	1.36	ECS-2100A-080
	9.216000	XC241-ND	2.13	1.92	1.53	1.36	ECS-2100A-092.1
	9.830400	XC242-ND	2.13	1.92	1.53	1.36	ECS-2100A-098.3
	10.000000	XC243-ND	2.13	1.92	1.53	1.36	ECS-2100A-100
	11.059200	XC244-ND	2.13	1.92	1.53	1.36	ECS-2100A-110.5
	12.000000	XC245-ND	2.13	1.92	1.53	1.36	ECS-2100A-120
	14.318180	XC246-ND	2.13	1.92	1.53	1.36	ECS-2100A-143
	14.745600	XC247-ND	2.13	1.92	1.53	1.36	ECS-2100A-147.4
	16.000000	X216-ND	2.13	1.92	1.53	1.36	ECS-2100A-160
	16.257000	XC248-ND	2.13	1.92	1.53	1.36	ECS-2100A-162.5
	18.000000	XC249-ND	2.13	1.92	1.53	1.36	ECS-2100A-180

(Continued)

Digi-Reel® Most SMT cutdown parts are available on a Digi-Reel®. For Digi-Reel part number, change 1-ND to 6-ND or CT-ND to DKR-ND. See Digi-Key® Services on page 2 for additional information.