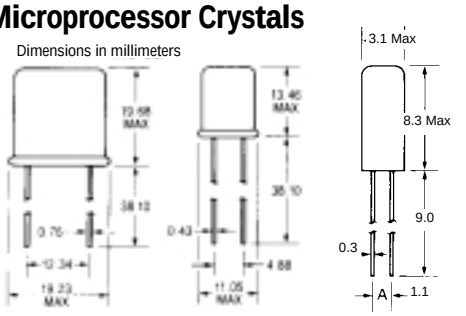
Microprocessor Crystals

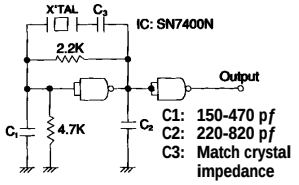
Dimensions in millimeters



HC33/U Case HC49/U (HC18/U) Case TF Case

- Frequency calibration tolerance: ± 50ppm @ 25°C
- Operating temperature: -10°C to +60°C
- Drive level: 4.0 mW maximum
- Frequency stability tolerance: ±50 ppm from -10°C to +60°C
- Shunt capacitance: 7p*f* maximum

Application Reference (4~14MHz) (Parallel Resonance)



HC33/U CASE

Part Number	Product Number	Frequency (MHz)	Impedance	Microprocessor	Pricing 1	10	100	1000
14349	CY1★	1.0	13p*f*	MC6800/6808/6809E/6500 series	**$4.95**	**$4.49**	**$3.95**	**$3.49**
14357	CY1.84	1.8432	Series	MC14411/CDP1802/CDP1804	**1.09**	**.99**	**.89**	**.69**

HC49/U (HC18/U) CASE

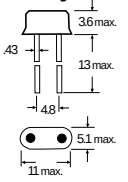
102613	CY1.843	1.8432	18p*f*	MC14411/MC6802	**$.99**	**$.79**	**$.59**	**$.49**
102621	CY2.0	2.0	Series	2650/F-8	**1.49**	**1.25**	**.99**	**.75**
101274	CY2.457	2.4576	32p*f*	CDP1702/1802C/1804/1804C	**.79**	**.69**	**.59**	**.49**
14525	CY3.27	3.2768	18p*f*	IM6100C/CDP1802/CDP1804	**.79**	**.69**	**.59**	**.49**
14533	CY3.57★	3.579545	18p*f*	MC6801,2,3/MM5369	**.79**	**.69**	**.59**	**.49**
14568	CY3.68	3.6864	18p*f*	8748/8035-8	**.79**	**.69**	**.59**	**.49**
14592	CY4★	4.0	20p*f*	MCS-40/MC6802,8,9/CDP1802	**.79**	**.69**	**.59**	**.49**
14621	CY4.91	4.9152	Series	CDP1802C/1804/1804C	**.79**	**.69**	**.59**	**.49**
14664	CY5.06	5.0688	Series	COM5016/5016T/5031	**.45**	**.35**	**.25**	**.19**
14681	CY6	6.0	18p*f*	MCS-48/IM8048	**.79**	**.69**	**.59**	**.49**
14699	CY6.14	6.144	30p*f*	MCS-85/8085	**.79**	**.69**	**.59**	**.49**
14710	CY7.37	7.3728	30p*f*	8051/8031	**.79**	**.69**	**.59**	**.49**
14728	CY8★	8.0	Series	IM6100A/MC68B09	**.79**	**.69**	**.59**	**.49**
14381	CY10★	10.0	Series	MCS-85/8085A-2	**.79**	**.69**	**.59**	**.49**
120061	CY11.05	11.0592	Series	General purpose	**.79**	**.69**	**.59**	**.49**
14402	CY12	12.0	Series	MCS-86/8086/8284/8202	**.79**	**.69**	**.59**	**.49**
14437	CY14.31	14.31818	Series	8080/8224/general purpose	**.59**	**.49**	**.39**	**.29**
14453	CY16	16.0	Series	8080/8224/general purpose	**.79**	**.69**	**.59**	**.39**
14517	CY20	20.0	Series	MCS-80/8080A/8224	**.79**	**.69**	**.59**	**.39**

TF CASE

14584	CY32.76	32.768kHz	10.5p*f*	Tuning fork	**$.79**	**$.69**	**$.59**	**$.49**

Low Profile Microprocessor Crystals

- Frequency range: 3.5 to 70.0MHz
- Operating temp.: -10˚C to +60˚C
- Drive level: 0.5mW (fundamental frequency)
- Aging: ±5ppm/year maximum
- Frequency stability tolerance: ±50ppm



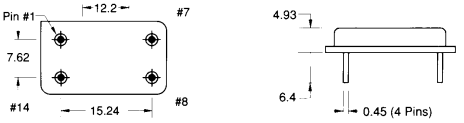
HC49/S Case

HC49/S CASE (Low Profile)

Part Number	Product Number	Frequency (MHz)	Impedance	Max. Resist.	Microprocessor	Pricing 1	10	100	1000
137816	CY3.57LP	3.579545	17p*f*	150Ω	MC6801, 2, 3 / MM5369	**$1.05**	**$.85**	**$.75**	**$.65**
137832	CY4LP	4.000	17p*f*	120Ω	MCS-40 / MC6802, 8 ,9 / CDP1802	**1.05**	**.85**	**.75**	**.65**
137859	CY8LP	8.000	Series	60Ω	IM6100A / MC68B09	**1.05**	**.85**	**.75**	**.65**
137875	CY11.05LP	11.0592	Series	50Ω	General purpose	**1.05**	**.85**	**.75**	**.65**
137891	CY16LP	16.000	Series	40Ω	8080 / 8224 / general purpose	**1.05**	**.85**	**.75**	**.65**

TTL Crystal Clock Oscillators (full can)

Dimensions in millimeters

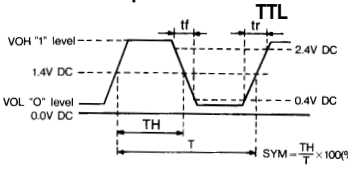


Specifications

- Input voltage: +5VDC, ±0.5VDC
- OSC series oscillators fit into a standard 14-pin DIP socket PN 37209 (pg 54)
- Frequency stability ±100ppm
- Operating temperature: 0°C to 70°C

Pin #	Function
1*	N/C
7	GND
8	Output
14	+5VDC

Output Waveforms



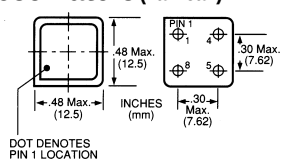
Part No.	Product No.	Frequency (MHz)	Input Current	Rise Fall time	Max Input Curr.	Output Curr.	1	10	100	1000
27861	OSC1	1.0	45mA	15ns	7mA	-1mA	**$2.95**	**$2.75**	**$2.49**	**$2.25**
27879	OSC184	1.8432	45mA	15ns	7mA	-1mA	**1.89**	**1.69**	**1.39**	**1.19**
27924	OSC2	2.0	30mA	15ns	7mA	-1mA	**2.29**	**2.09**	**1.95**	**1.75**
27967	OSC4	4.0	50mA	10ns	7mA	-1mA	**1.89**	**1.69**	**1.39**	**1.19**
27991	OSC8	8.0	30mA	15ns	15mA	-3mA	**1.29**	**1.09**	**.89**	**.69**
27887	OSC10	10.0	20mA	10ns	15mA	-3mA	**1.29**	**1.09**	**.89**	**.69**
144207	OSC11.05	11.059	30mA	10ns	50mA	-3mA	**1.29**	**1.09**	**.89**	**.69**
27895	OSC12	12.0	50mA	10ns	15mA	-3mA	**1.29**	**1.09**	**.89**	**.69**
108652	OSC14.31	14.31818	50mA	10ns	15mA	-3mA	**1.29**	**1.09**	**.79**	**.59**
27908	OSC16	16.0	50mA	10ns	15mA	-3mA	**1.29**	**1.09**	**.89**	**.69**
27932	OSC20	20.0	20mA	10ns	17mA	-3mA	**1.29**	**1.09**	**.89**	**.69**
76814	OSC25	25.0	15mA	7ns	18mA	-3mA	**1.29**	**1.09**	**.89**	**.69**
27941	OSC32	32.0	15mA	7ns	18mA	-4mA	**1.29**	**1.09**	**.89**	**.69**
76822	OSC33	33.0	15mA	6ns	18mA	-4mA	**1.89**	**1.69**	**1.39**	**1.19**
153226	OSC40	40.0	15mA	6ns	18mA	-4mA	**1.29**	**1.19**	**.99**	**.79**
76831	OSC50	50.0	25mA	6ns	25mA	-4mA	**1.29**	**1.19**	**.99**	**.79**
77489	OSC80	80.0	80mA	3ns	25mA	-4mA	**1.89**	**1.69**	**1.39**	**1.19**
76857	OSC100	100.0	90mA	3ns	25mA	-4mA	**2.49**	**2.25**	**1.95**	**1.75**

Socket

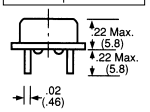
133006

Part No.	Description	1	10	100	1000
133006	14-pin full can oscillator socket, low profile soldertail	**$.59**	**$.45**	**$.39**	**$.35**

TTL Crystal Clock Oscillators (half can)



Pin #	Function
1	N/C
4	GND
5	Output
8	+5VDC



- OSCH series oscillators fit into a standard 8-pin DIP socket P/N 51625 (pg 54)
- Input voltage: +5VDC, ±0.5VDC • Frequency stability: ±100ppm • Operating temperature: 0°C to 70°C

Part Number	Product Number	Frequency (MHz)	Input Current	Rise Fall time	Max Input Current	Output Current	1	10	100	1000
95249	OSC1H	1.0	20mA	6ns	30mA	-0.4mA	**$2.75**	**$2.49**	**$2.25**	**$1.95**
102779	OSC10H	10.0	30mA	6ns	45mA	-0.4mA	**1.95**	**1.75**	**1.49**	**1.25**
172161	OSC50H	50.0	20mA	6ns	30mA	-0.4mA	**1.75**	**1.49**	**1.25**	**1.15**