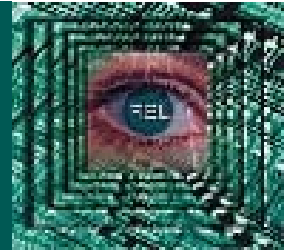


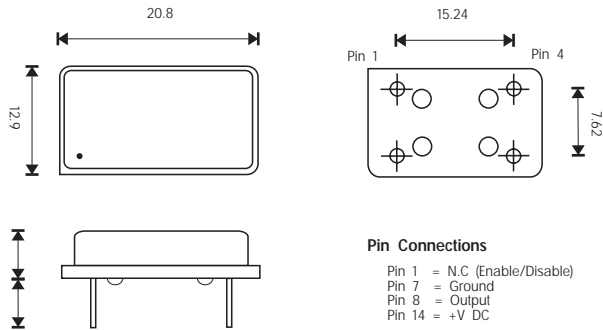
Specify AEL

Dual-In-Line Clock Oscillators Universal Output Hcmos/TTL Compatible

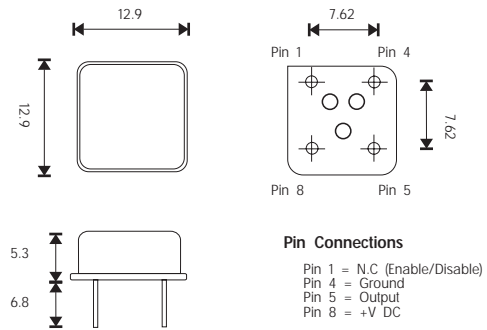


Quartz Crystal Oscillators

AEL 9710 Series (14-Pin DIP)



AEL 1210 Series (8-Pin DIP)



FEATURES

- Standard Frequencies in Stock
- Fast Turnaround Options
- Low Cost
- Industry Standard Device

APPLICATIONS

- IT Applications
- Datacommunications
- Telecommunications
- Automotive Electronics

STANDARD SPECIFICATION

AEL Model Number	9710	9711	97103	97113	1210	1211	12103	12113	1070	
Input Voltage	+5.0V DC +/-10%		+3.3V +/-10%		+5.0V DC +/-10%		+3.3V +/-10%		+5.0V DC +/-10%	
Variant	Standard	Enable/Disable	Standard	Enable/Disable	Standard	Enable/Disable	Standard	Enable/Disable	N/A	
Output	TTL & Hcmos (Universal O/P)				TTL & Hcmos (Universal O/P)				Hcmos Dual Frequency	
Frequency Range	400kHz ~ 150MHz		0.5 ~ 70 MHz		400kHz ~ 150MHz		0.5 ~ 70 MHz		4 MHz ~ 105MHz	
Package	14-Pin DIL				8-Pin DIL				14-Pin DIL	
Tristate	N/A	Pin 1	N/A	Pin 1	N/A	Pin 1	N/A	Pin 1	N/A	
Overall Stability	+/-100PPM				+/-100PPM				+/-100PPM	
Op. Temp. Range	0°C to +70°C				0°C to +70°C				0°C to +70°C	
Symmetry	60:40 (45:55 Available)				60:40 (45:55 Available)				45:55	
Rise/Fall Time	0.4 ~ 25MHz	10nS		10nS		10nS		10nS	0.4 ~ 25MHz	
	25.1 ~ 70MHz	6nS		6nS		6nS		6nS	25.1 ~ 70MHz	
	70.1 ~ 100MHz +	4 nS	N/A		4 nS	N/A		4 nS	70.1 ~ 100MHz +	
'0' Level (Max.)	+0.5V (10% V _{DD})		0.5V		+0.5V (10% V _{DD})		0.5V		+0.5V (10% V _{DD})	
'1' Level (Min.)	+4.5V (90% V _{DD})		2.4V		+4.5V (90% V _{DD})		2.4V		+4.5V (90% V _{DD})	
Input Current (Max)	0.4 ~ 20MHz	20mA		10mA		20mA		10mA		30mA
	20.1 ~ 70MHz	40mA		20mA		40mA		20mA		50mA
	70MHz+	60mA		N/A		60mA		N/A		N/A
Output Load	1TTL or 15pF (50pF Avail.)				1TTL or 15pF (50pF Avail.)				15pF	

OTHER OPTIONS AVAILABLE

- -40°C to +85°C
- -55°C to +125°C
- Military Clock Oscillators
- 45:55 Symmetry
- Low Current
- Low Frequency
- Range of Stabilities
- 50pF Heavy Load

ORDERING CODE

Stability	Temp. Range	Symmetry
A = ± 25PPM	S = 0°C to +70°C	N = 40:60
B = ± 50 PPM	I = -40°C to +85°C	H = 45:55
C = ± 100PPM	M = -55°C to +125°C	
E = ± 10PPM	MQ = Mil Assessed	

e.g AEL 12113CSH would be 8-Pin Hcmos O/P +/-100PPM over 0°C to +70°C with +3.3V Supply and 45:55 (High) Symmetry



quartz based frequency control components

Order Hotline +44 1293 524245

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