

FREQUENCIES AVAILABLE	MODEL DESIGNATOR	OVERALL STABILITY
40kHz~150MHz	1210A 1210B 1210C	± 25 PPM ± 50 PPM ± 100 PPM

Note 1 Stability options are inclusive of: Calibration Tolerance at 25°C, Operating Temperature Range, Supply Voltage Change, Load Change, Ageing, Shock & Vibration.

Parameter	Code	Value	Unit	Remarks
Storage Temperature Range	Tstg	-55 to +125	°C	
Operating Temperature Range	Top	0 to +70	°C	
Input Voltage	V _{CC}	+5	V DC	$\pm 10\%$
Max Input Current	ICC	20 40 60	mA Max	500 kHz to 20MHz 20.1MHz to 70MHz 70.1MHz to 150MHz
Duty Ratio	SY	40:60	%	At 50% V _{DD}
"0" Level	V _{OL}	0.5	V DC	Max
"1" Level	V _{OH}	4.5	V DC	Min
Max Rise/Fall Time	Tr:Tf	10 6 4	nS Max	500 kHz to 20MHz 20.1MHz to 70MHz 70.1MHz to 150MHz
Start-Up Time	TSTART	5	mS	
Fan-Out (Load)		15pF Min 1-10 TTL		HCmos TTL

MECHANICAL

Drop Test - Drop Module onto a hard wooden surface from 20cm 3 times

Shock Test - 1500g (Peak) 0.35mS (1/2 Sine Wave) 5 Times

Vibration Test - Vibrations with an amplitude of 3mm and a sweep from 10-55 Hz duration 1 minute shall be applied for 2 hours in each of the x,y, & z axes

ENVIRONMENTAL

Solder Heat - Immerse pins to within 1mm of glass stand-offs in solder bath of 280°C $\pm 10^\circ$ C for 10 secs

Life Test - After exposure to +125°C (Power Applied) for 1000 Hrs

Cold Resistance - After exposure to -40°C for 2 hrs

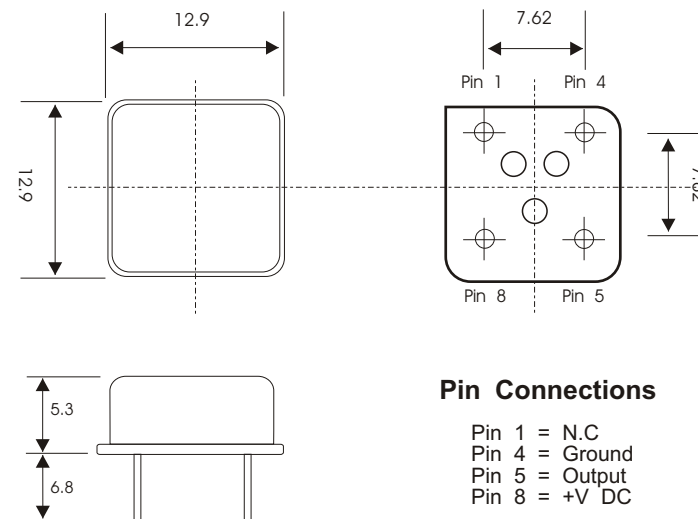
Humidity - After exposure to +40°C 90-95% RH for 48 Hrs

Thermal Shock - After 10 cycles of exposure to -55°C & 125°C with 10mins exposure at each extreme

Fine Leak - Helium leak detector, pressure 5kg.f/cm³ for 2 Hrs, leakage less than 1×10^{-8} Atm.cc/Sec

TITLE: AEL 1210 Series Crystal Oscillator 8-Pin DIL UNIVERSAL O/P (Hcmos & TTL) 500kHz to 100MHz

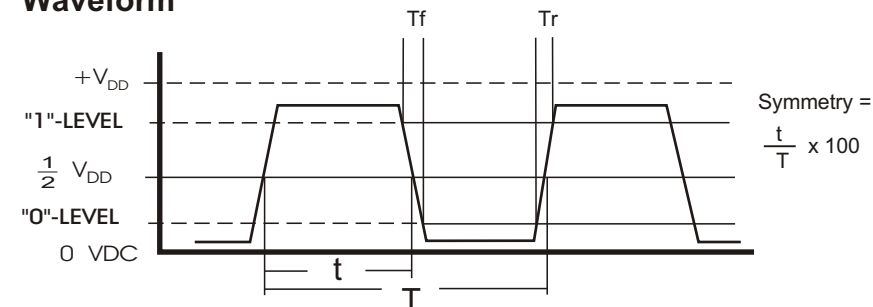
AEL PART N°	Issue Number	Issue Date	Approved
General Specification	5	19/03/2000	GR
	Frequency Increased to 150MHz		



Pin Connections

Pin 1 = N.C
Pin 4 = Ground
Pin 5 = Output
Pin 8 = +V DC

Waveform



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