

FREQUENCY RANGE	OVERALL STABILITY OPTIONS
400kHz ~ 160MHz	9710A = 25PPM 9710B = 50PPM 9710C = 100PPM

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	-65 to +125	°C	
Operating Temperature Range	Top	0 to +70	°C	
Input Voltage	Vcc	+5	V DC	10%
Max Input Current	ICC	20	mA Max	500 kHz to 20MHz
		40		20.1MHz to 80MHz
		50		80.1MHz to 160MHz
Duty Ratio	SY	50:50 10%	%	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	nS Max	500 kHz to 20MHz
		6		20.1MHz to 70MHz
		4		70.1MHz to 100MHz
Start-Up Time	TSTART	5	mS	
Fan-Out (Load)		15pF Min		HCmos
		1-10 TTL		TTL

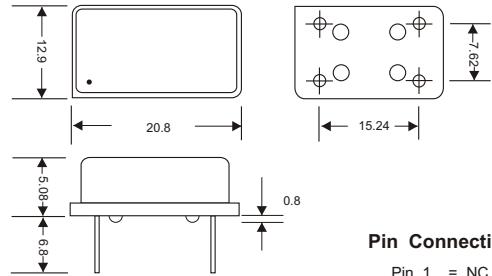
MECHANICAL

- 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 ±10°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/cm² for 2 Hrs, leakage less than 1 x 10⁻⁸ Atm.cc/Sec

TITLE: AEL 9710 Series Oscillator 14-Pin DIL UNIVERSAL O/P (Hcmos & TTL) 400kHz to 160MHz

AEL Stock Code **Issue Number** **Issue Date** **Approved**

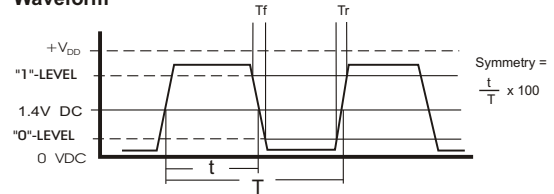
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Pin Connections

- Pin 1 = NC
- Pin 7 = Ground
- Pin 8 = Output
- Pin 14 = +V DC

Waveform



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