

FREQUENCY: 500kHz to 100MHz

OVERALL STABILITY: +/-100PPM

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

ELECTRICAL

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 70MHz
		60		70.1MHz to 100MHz
Duty Ratio	SV	45:55	%	At 50% Vcc
"0" Level	VOL	0.5	V DC	Max
"1" Level	VOH	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	
		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 (16Sine 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/cm² for 2 Hrs, leakage less than 1 x 10⁻⁹ atm cc/Sec

TITLE: Crystal Oscillator 14-Pin DIL UNIVERSAL O/P (Hcmos & TTL) 500kHz to 100MHz

AEL PART N°

AEL 9710CSN

Issue Number

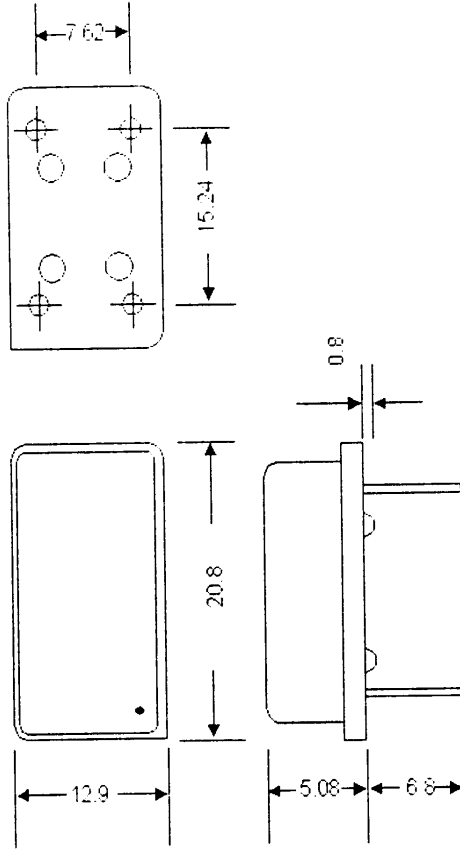
3

Issue Date

21/08/95

Approved

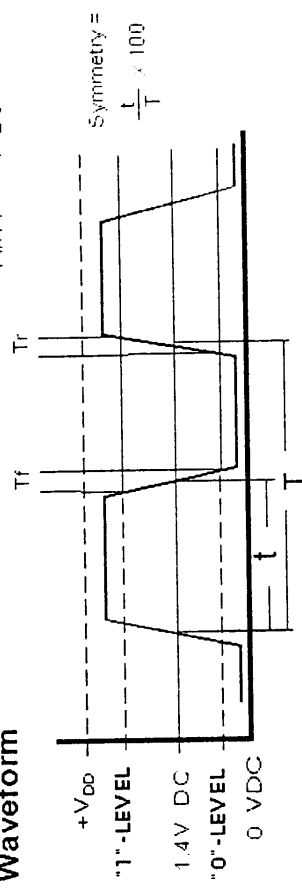
GR



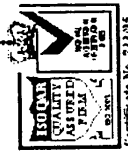
Pin Connections

- Pin 1 = N.C.
- Pin 7 = Ground
- Pin 8 = Output
- Pin 14 = +V DC

Waveform



- 571-763 to 842 -



AEL CRYSTALS LIMITED

Module 'D' Airtech 2
Jenner Road, Crawley
W. Sussex. RH10 2GA
Tel: 01293 524245
Fax: 01293 524888

© Not to be reproduced without permission of AEL Crystals Ltd