![fordahl FREQUENCY CONTROL PRODUCTS logo]

SURFACE MOUNT CLOCK OSCILLATOR

DFN S11-ELPI (3.3 V) & DFN S11-EDPI (2.5 V)

FEATURES
10 TO 200 MHz
Fundamental and 3rd overtone mode crystals
Low jitter
APPLICATIONS
Datacomms

Function	DFN S11
E / D	1
NC	2
GND	3
Output 1	4
Output 2	5
Vcc	6

L	7.5 mm
H	1.7 mm

PC board footprint
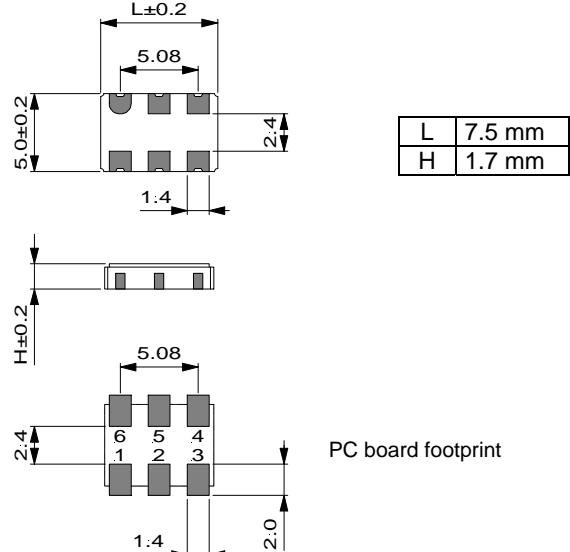
TYPE	DFN S11-ELPI	DFN S11-EDPI
Frequency Range	10 to 200 MHz	

ELECTRICAL SPECIFICATIONS		
supply voltage	3.3 V ± 5 %	2.5 V ± 5 %
supply current (no load)	≤ 120 mA	
output load	LVPECL (50 Ω to 1.3 V)	LVPECL (50 Ω to 0.5 V)
duty cycle @ 50% level	45/55…55/45 %	45/55…55/45 %
rise/fall times (20 to 80%)	≤ 2 ns	≤ 2 ns
high/low levels	≥ 2.27 V/ ≤ 1.68 V	≥ 1.47 V/ ≤ 1.09 V
jitter RMS (12 kHz to 20 MHz)	≤ 1 ps	≤ 1 ps
enable / disable on pin 1	high or open = enable, low = disable	high or open = enable, low = disable
complementary output on pin 5	180° phase shifted	180° phase shifted
start up	≤ 10 ms @ 3.15 V	≤ 10 ms @ 2.37 V

FREQUENCY STABILITY		stability [ppm] and temperature code				
types	temperature range	stability	code	stability	code	stability	code
all types	0 to 70°C	≤ ± 25	XB25	≤ ± 50	XB50	≤ ± 100	XB100
	-40 to 85°C	≤ ± 50	XE50	≤ ± 75	XE75	≤ ± 100	XE100
remarks	stability includes calibration at 25°C, temperature, ageing, Vcc and load changes 1st yr.					

OPTIONS			
stability over long life time	A = 5 years	B = 10 years	C = 15 years

ORDERING CODE	**type + option code + frequency + stability/temperature code**
Example	DFN S11-ELPI 155.52 MHz XE50B

REMARK	**Please consult factory for life time/stabilities possible combinations**