

# HCMOS & TTL COMPATIBLE CLOCK OSCILLATORS

## TYPES DFN 14-B, DFN 4-B, DFN 14-H & DFN 4-H

TTL AND HCMOS COMPATIBLE OUTPUT

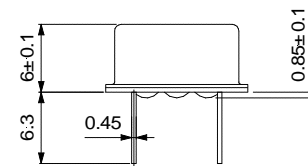
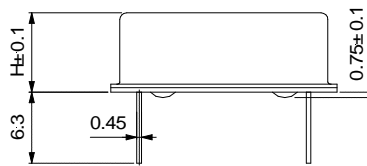
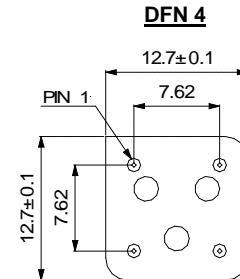
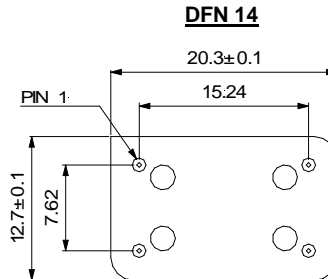
AVAILABLE ON EXPRESS DELIVERY

STANDARD PACKAGES

HIGH FREQUENCIES

LOW COST

Function	DFN 14	DFN 4
NC/Enable	1	1
GND	7	4
Output	8	5
Vcc	14	8



H = 5.10 mm

TYPE	DFN 14-B	DFN 4-B	DFN 14-H	DFN 4-H
Frequency Range	1 to 100 MHz	1 to 70 MHz	1 to 100 MHz	1 to 70 MHz

ELECTRICAL SPECIFICATIONS		DFN 14-B	DFN 4-B	DFN 14-H	DFN 4-H
supply voltage		5 V ± 5 %		5 V ± 5 %	
supply current (no load)	? 20 MHz ? 70 MHz > 70 MHz	? 20 mA ? 40 mA ? 90 mA		? 20 mA ? 40 mA ? 90 mA	
output load		HCMOS 15 pF or 10 TTL		HCMOS 50 pF up to 25 MHz or 15 pF > 25 MHz	
duty cycle		40/60...60/40 % @ 50% level or 1.4 V		40/60...60/40 % @ 50% level	
rise/fall times		10 to 90 % ? 5 ns		10 to 90 % ? 10 ns up to 25 MHz	
high/low levels		0.4 to 2.4 V ? 3.5 ns		? 6 ns > 25MHz	
		? 4.5 V / ? 0.5 V		? 4.5 V / ? 0.5 V	
start up		? 10 ms @ 4.75 V		? 10 ms @ 4.75 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	all types > 70 MHz available with XB50 or XB100 stability/temperature codes stability includes calibration at 25°C, temperature, ageing, Vcc and load changes 1 <sup>st</sup> yr.						

OPTIONS	CODE	
tighter symmetry	R	
tri-state output on pin 1	Z	high or open = enable, low = high Z
		45/55...55/45 % available up to 25 MHz high or open = enable, low = high Z

ORDERING CODE	type + option code + frequency + stability/temperature code	
Example	DFN 14-BZ 16.000 MHz XE75	DFN 4-H 24.576 MHz XB100