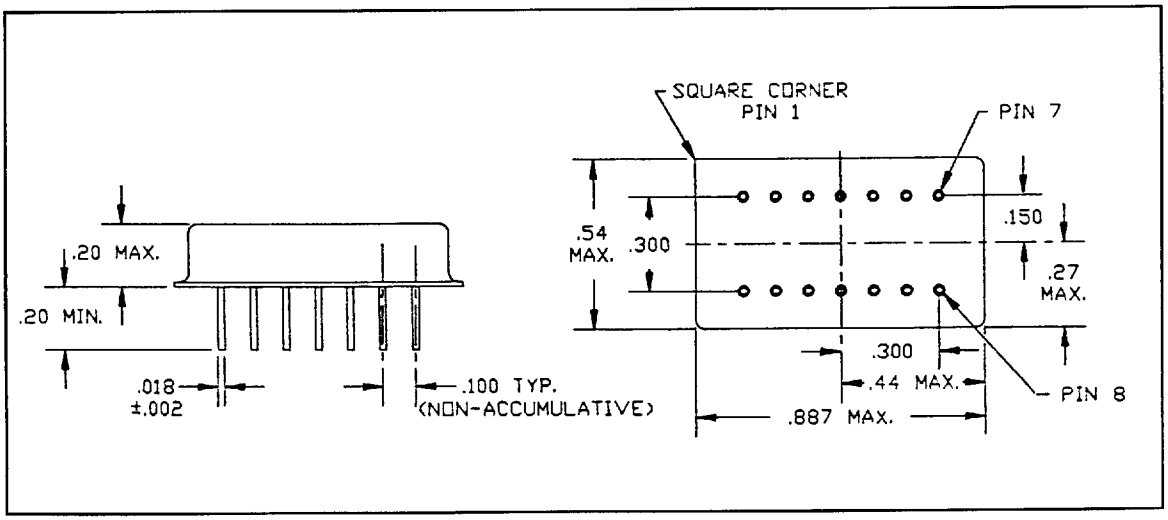
OSCILLATORS

Hybrid Clock Oscillators

Shown in this section are the hybridized clock oscillators which are equivalent to MIL-O-55310/08, /14, and /16 together with their frequency ranges and specifications. To order any of these parts from PTI, simply give the PTI sales engineer the model number, the dash number and the desired frequency. For example, an XH515C-08 refers to a /14 oscillator with a frequency between 15 and 25 MHz.

The drawing below shows the mechanical configuration of all three oscillator types and the Pin Function table shows how the pins are used in this configuration for each particular oscillator type.



PIN	FUNCTION /14 XH515C	FUNCTION /08 XH516C	FUNCTION /16 XH517C
1	NC	OUTPUT	NC
2	INTERNAL TIE	CASE	INTERNAL TIE
3	INTERNAL TIE	INTERNAL TIE	INTERNAL TIE
4	SUPPLY +	INTERNAL TIE	NC
5	OUTPUT	INTERNAL TIE	NC
6	NC	NC	NC
7	GND/CASE	NC	GNC/CASE
8	NC	GND	OUTPUT
9	NC	NC	NC
10	NC	INTERNAL TIE	NC
11	NC	INTERNAL TIE	NC
12	INTERNAL TIE	INTERNAL TIE	INTERNAL TIE
13	INTERNAL TIE	NC	INTERNAL TIE
14	NC	SUPPLY +	SUPPLY +

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Dash #	Output Frequency Range	Input Power mA	Pulse Characteristics			Initial Accuracy (ppm)	Aging ppm/yr after 30 days	Frequency Stability		
			Rise Fall (NS)	Symmetry @ 1.4 V (%)	Max Load (TTL)			-55 to +125 °C "A"	-55 to+105 °C "B"	-20 to +70 °C "C"
PTI MN: XH515C (55310/14)										
-01	31.25 kHz to 150 kHz	158	15	45/55	10	15	5	50	40	25
-02	150 kHz to 300 kHz	94	15	45/55	10	15	5	50	40	25
-03	300 kHz to 600 kHz	94	15	45/55	10	15	5	50	40	25
-04	600 kHz to 2.5 MHz	50	15	45/55	10	15	5	50	40	25
-05	2.5 MHz to 5 MHz	40	15	45/55	10	15	5	50	40	25
-06	5 MHz to 10 MHz	30	15	45/55	10	15	5	50	40	25
-07	10 MHz to 15 MHz	20	15	40/60	10	15	5	50	40	25
-08	15 MHz to 25 MHz	20	5	40/60	10	15	5	50	40	25
PTI MN: XH516C (55310/8)										
-01	31.25 kHz to 150 kHz	158	15	45/55	10	15	5	50	40	25
-02	150 kHz to 300 kHz	94	15	45/55	10	15	5	50	40	25
-03	300 kHz to 600 kHz	94	15	45/55	10	15	5	50	40	25
-04	600 kHz to 2.5 MHz	50	15	45/55	10	15	5	50	40	25
-05	2.5 MHz to 5 MHz	50	15	45/55	10	15	5	50	40	25
-06	5 MHz to 10 MHz	35	15	40/60	10	15	5	50	40	25
-07	10 MHz to 20 MHz	25	15	40/60	10	15	5	50	40	25
-08	20 MHz to 30 MHz	35	5	40/60	10	15	5	50	40	25
-09	30 MHz to 50 MHz	50	5	40/60	10	15	5	50	40	25
PTI MN: XH517C (55310/16)										
-01	31.25 kHz to 150 kHz	94	15	45/55	10	15	5	50	40	25
-02	31.25 kHz to 150 kHz	94	15	45/55	10	25	10	100	80	50
-03	150 kHz to 5 MHz	70	15	45/55	10	15	5	50	40	25
-04	150 kHz to 5 MHz	70	15	45/55	10	25	10	100	80	50
-05	4 MHz to 20 MHz	30	15	40/60	10	15	5	50	40	25
-06	4 MHz to 20 MHz	30	15	40/60	10	25	10	100	80	50
-07	20 MHz to 60 MHz	65	5	40/60	6	15	5	50	40	25
-08	20 MHz to 60 MHz	65	5	40/60	6	25	10	100	80	50

Notes:

1) Supply voltage : +5 Vdc + 10%
2) Input power is the maximum input power for no load condition.
3) The rise and fall values are measurements to be taken between 0.8 V and 2.0 V level.
4) One TTL load is defined as 1.6 mA sink, 0.04 mA source and 2.0 pF.
5) Output Voltage at designated Load: Logic 1: 2.4 V min; Logic 0: 0.5 V max.
6) Frequency Stability vs Supply Voltage: 2ppm max. for 10% voltage change
7) Storage temperature: -62°C to +125°C