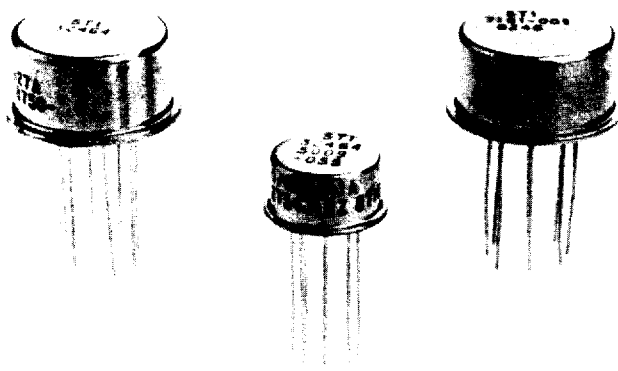


HYBRID CRYSTAL OSCILLATORS

T-50-23

SUBMINIATURE HYBRID CRYSTAL OSCILLATORS

SERIES 7181/7180/7150 TTL / 4181/4180/4150 CMOS



FEATURES:

- High Reliability
- TO-5 and TO-8 package styles
- Low Profile, (7150/4150, 7180/4180)
- Any frequency, 3.5 Hz to 65 MHz

OPTIONS:

- Screening per MIL-STD-883 Class B when specified (Class S also available).
 - QPL Units
- TTL: M55310/09, /10
(Spectrum Series 5009, 5010)
CMOS: M55310/12
(Spectrum Series 5012)

DESCRIPTION AND APPLICATIONS:

Series 7181/7180/7150/4181/4180/4150 are produced with thick film hybrid circuits and integrally mounted crystals in a resistance weld, hermetically sealed package. This proven design provides a mechanically rugged package for high reliability, low aging applications in military, aerospace and Hi-Rel commercial systems. Screening to the requirements of MIL-STD-883 or MIL-O-55310 is available.

Prices range from approximately \$35.00 to \$200.00 depending on frequency, specified temperature range, and quantity.

SPECIFICATIONS:

TTL:	Supply Voltage:	+5 Vdc @ 10 to 50 mA depending on frequency.
	Frequency:	TO-8 - 28 Hz to 65 MHz TO-5 - 70 kHz to 65 MHz
	Logic 0/1:	+0.5 V max./+2.5 V min., 10 TTL Loads
CMOS:	Supply Voltage:	+10 to +15 Vdc @ 2 to 15 mA Depending on frequency and supply voltage which must be specified. (+5 Vdc available on certain designs)
	Frequency:	TO-8 - 3.5 Hz to 20 MHz TO-5 - 500 Hz to 20 MHz
OUTPUT:	Logic 0/1:	0.1 VDD max./0.9-VDD min.

PIN CONNECTIONS:	7150/7181	7180
	4150/4181	4180
FUNCTION	PIN	PIN
Common (case)	4	6
Output	5	5
Supply	8	12

Note: Where other pins are present they may be internally connected and are not to be used as external tie points.

ACCURACY AND STABILITY OPTIONS:

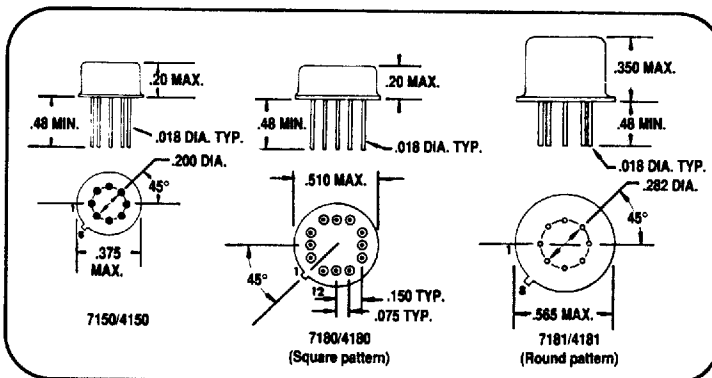
Any of the following standard temperature ranges and accuracy/stability "Mix & Match" combinations are available.

TEMP RANGES:	STANDARD STABILITIES
0 to +70°C	±0.1% (1000 ppm)
-40 to +85°C	±0.05% (500 ppm)
-55 to +105°C	±0.01% (100 ppm)
-55 to +125°C	±0.005% (50 ppm)

Other stabilities and temperature ranges are available for special applications.

SPECIAL MODEL NUMBER DESIGNATION:

For specific applications a three digit dash number (suffix) is added to the Series number to provide a complete model number designation. This is assigned for convenience in ordering and is maintained as a unique cross reference designation to a specific customer part or specification number.



Specifications subject to change without notice.