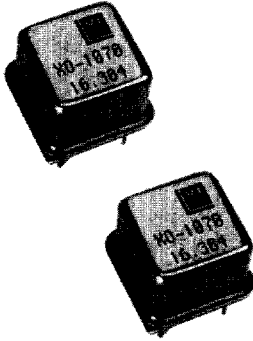


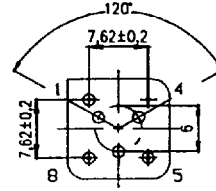
# Packaged Crystal Clock Oscillators

## XO-1070



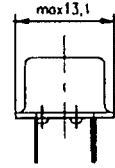
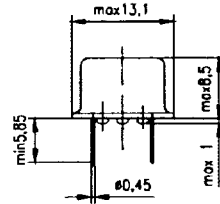
### Features

- DIL-8 standard-XO
- 2.0MHz to 30MHz
- -20°C to +70°C
- HCMOS-output



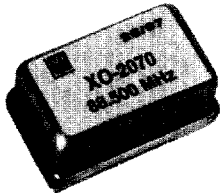
### Pin configuration

1. N.C.
7. Ground, case
8. RF-output
- 14 Supply voltage



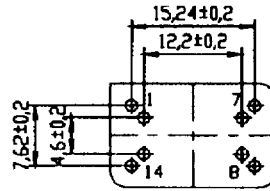
Note: Dimensions in mm

## XO-2070 XO-4085



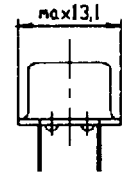
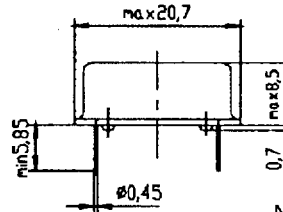
### Features

- DIL-14 standard-XO
- 25kHz to 100MHz
- -20°C to +70°C (XO 2070)
- -40°C to +85°C (XO 4085)
- HCMOS-output



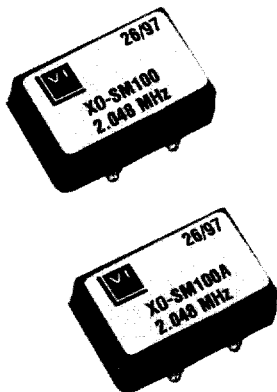
### Pin configuration

1. N.C.
7. Ground, case
8. RF-output
- 14 Supply voltage



Note: Dimensions in mm

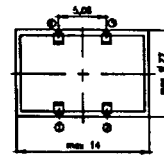
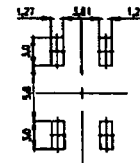
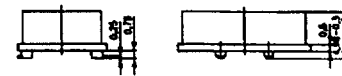
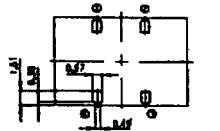
## XO-SM100/SM100A



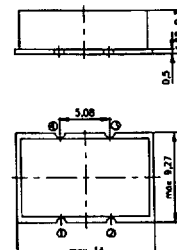
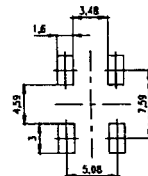
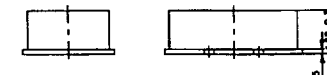
### Features

- Small SMD standard-XO
- 2.0MHz to 80MHz
- -20°C to +70°C
- HCMOS/SG 615 compatible

### SM100A



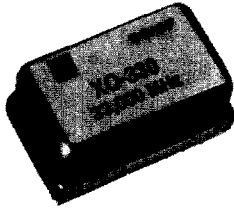
### SM100



Note: Dimensions in mm

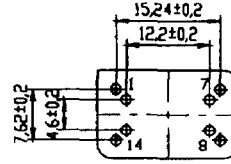
# Packaged Crystal Clock Oscillators

## XO-330

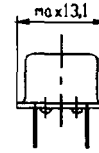
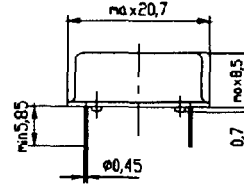


### Features

- DIL-14 standard-XO
- 16MHz to 70MHz
- -20°C to +70°C
- 3.3 volt supply voltage

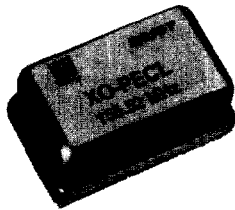


- Pin configuration
1. N.C.
  7. Ground, case
  8. RF-output
  14. Supply voltage



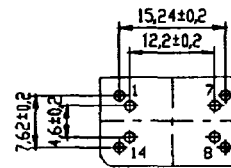
Note: Dimensions in mm

## XO-PECL

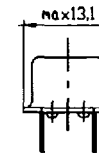
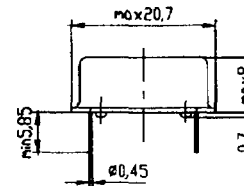


### Features

- DIL-14 standard-XO
- 68.736 to 155.52 MHz
- -20 to +70°C
- PECL-output



- Pin configuration
1. N.C.
  7. Ground, case
  8. RF-output
  14. Supply voltage  $U_b$



Note: Dimensions in mm

## SPECIFICATIONS

Series	XO-1070	XO-2070 / XO-4085	XO-SM100/XO-SM100A	XO-330	XO-PECL
Frequency range:	2 MHz to 30 MHz	25 MHz to 100 MHz	2 MHz to 80 MHz	16 MHz to 70 MHz	68.736 MHz to 155.52 MHz
Nominal frequency tolerance, @ T=25±3°C:	<±10 ppm	<±10 ppm	<±10 ppm	<±10 ppm	<±10 ppm
Frequency stability					
in the temperature range -20°C to +70°C	<±15 ppm	<±10 ppm	<±15 ppm	<±10 ppm	<±10 ppm
in the temperature range -40° to +85°C		<±20 ppm			
vs. supply voltage changes $U_b \pm 5\%$ :	<±3 ppm	<±3 ppm	<±3 ppm	<±6 ppm	<±10 ppm
vs. load changes:	<±2 ppm (1 to 10 HCMOS)	<±2 ppm (1 to 10 HCMOS)	<±1 ppm (20% load change)	<±2 ppm (10% load change)	<±0.2 ppm (10% load change)
Aging:	±5 ppm/first year ±3 ppm following years	±3 ppm/first year ±1 ppm following years	±3 ppm/first year ±1 ppm following years	±5 ppm/first year ±2 ppm following years	±3 ppm/first year ±1 ppm following years
Supply voltage $U_b$ :	5 V ±5%	5 V ±5%	5 V ±5%	3.3 V ±10%	5 V ±5%
Current consumption with load 1 kOhm // 15pF:	≤25 mA	≤25 mA (f<40 MHz) ≤30 mA (f>40 MHz)	≤20 mA (f<35 MHz) ≤30 mA (f>35 MHz)	≤15 mA	≤70 mA
Output voltage:	HCMOS Low <1.0 V; High > 4.0V	HCMOS Low <1.0 V; High > 4.0V	HCMOS Low <0.4 V; High > 4.0V	LQVMOS; Low <0.8 V; High > 2.0V	PECL squarewave 10k and 100k compl.
load:	1 kOhm // 15pF	1 kOhm // 15pF	1 kOhm // 15pF	1 kOhm // 15pF	50 Ohm
duty cycle:	40/60%	40/60%	40/60%	40/60%	40/60%
rise time, fall time:	8 ns (for f<40 MHz)	8 ns (for f<40 MHz) 5 ns (for f>40 MHz)	5 ns	<4 ns	≤2 ns
Temperature ranges					
Operating:	-20°C to +70°C	-20°C to +70°C -40°C to +85°C	-20°C to +70°C	-20°C to +70°C	-20°C to +70°C
Operable:	-25°C to +75°C	-25°C to +75°C -40°C to +85°C	-25°C to +75°C	-25°C to +75°C	-30°C to +80°C
Storage:	-40°C to +85°C	-40°C to +85°C -55°C to +105°C	-40°C to +85°C	-40°C to +85°C	-55°C to +105°C