

# TEMPERATURE COMPENSATED CRYSTAL OSCILLATORS 5900 SERIES

## Model 5920A

## 5925A

- Main applications: Communications equipment.
- Features
  - Stable frequency over wide frequency range
  - Low power consumption

### ■ Specification

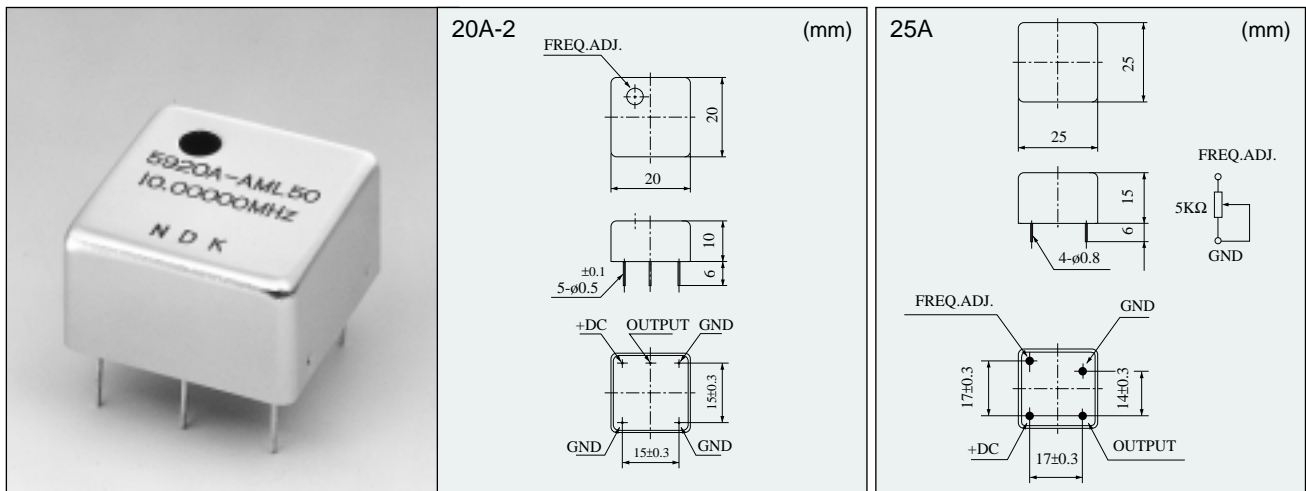
Item	5920A			5925A				
	Model Spec. Code	AKG50	ALH50	AML50	AJD50	AKG50	ALH50	AML50
Standard Nominal Frequency (MHz)	10~20			10~25				
Frequency Stability	$\pm 1 \times 10^{-6}$	$\pm 1.5 \times 10^{-6}$	$\pm 2 \times 10^{-6}$	$\pm 0.5 \times 10^{-6}$	$\pm 1 \times 10^{-6}$	$\pm 1.5 \times 10^{-6}$	$\pm 2 \times 10^{-6}$	$\pm 5 \times 10^{-6}$
	-20 ~+60°C	-20 ~+70°C	-30 ~+75°C	-10 ~+50°C	-20 ~+60°C	-20 ~+70°C	-30 ~+75°C	-40 ~+85°C
Supply Volt Change	$\pm 0.2 \times 10^{-6} / +5V \pm 5\%$							
Supply Voltage	+5VDC							
Current Consumption	5mA max							
Output Voltage	1V (Peak to Peak) min							
Load	10k $\Omega$ //10pF							
Aging	$\pm 1 \times 10^{-6}$ /year							
Frequency Trim Range	$\pm 3 \times 10^{-6}$ min			$\pm 3 \times 10^{-6}$ min (*)				
Case Code	20A-2			25A				

If you need NON-standing spec., please contact us.

\*.....by external variable resistor

Refer to FREQ. ADJ. shown in external symbol Fig. 25A.

### ■ Dimensions



# CRYSTAL OSCILLATORS

## TEMPERATURE COMPENSATED CRYSTAL OSCILLATORS 5900 SERIES

### Model 5921A

5950C

■ Main applications: Communications equipment.

- Features
- Compactness and light weight.
  - Stable frequency over wide frequency range
  - Low power consumption

### Specification

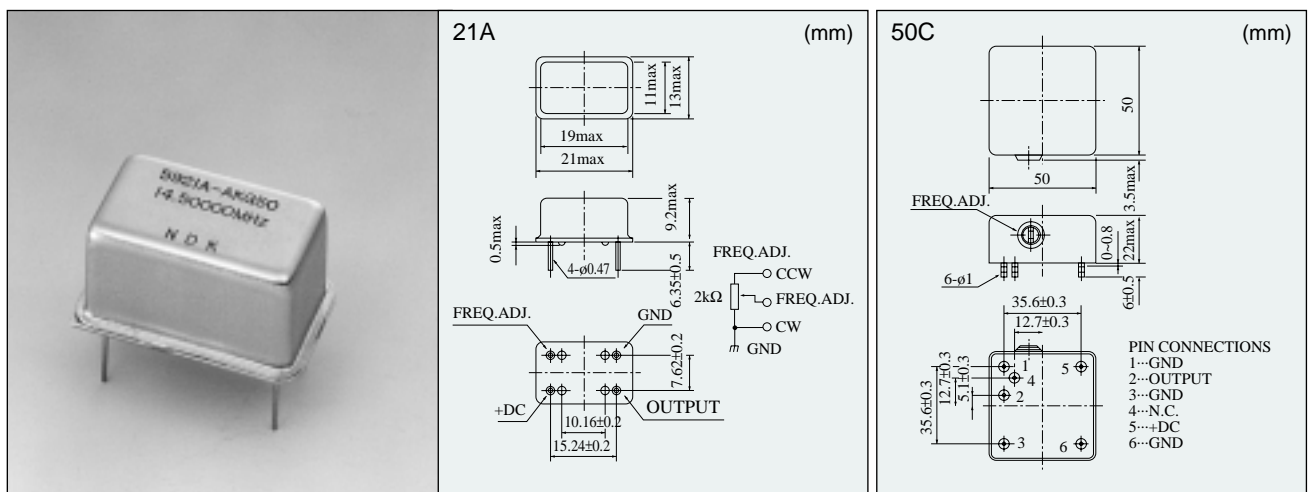
Item	Model 5921A		5950C									
	Spec. Code	5921A	AKG50	AMG50	AKG00	ALH00	AML00	BKG00	BLH00	BML00	PKG00	PLH00
Standard Nominal Frequency (MHz)		12.8 12.288 14.5	20~25			25~60			60~200			
Frequency Stability		$\pm 1 \times 10^{-6}$	$\pm 2 \times 10^{-6}$	$\pm 1 \times 10^{-6}$	$\pm 1.5 \times 10^{-6}$	$\pm 2 \times 10^{-6}$	$\pm 1 \times 10^{-6}$	$\pm 1.5 \times 10^{-6}$	$\pm 2 \times 10^{-6}$	$\pm 1 \times 10^{-6}$	$\pm 1.5 \times 10^{-6}$	$\pm 2 \times 10^{-6}$
			-20~+60°C	-20~+60°C	-20~+70°C	-30~+75°C	-20~+60°C	-20~+70°C	-30~+75°C	-20~+60°C	-20~+70°C	-30~+75°C
Supply Volt Change		$\pm 0.5 \times 10^{-6} / +8V \pm 5\%$		$\pm 0.2 \times 10^{-6} / +12V \pm 5\%$								
Supply Voltage		+8VDC		+12VDC								
Current Consumption		7mA max		15mA max						40mA max		
Output Level		1V (Peak to Peak) min		1mW min (0dBm min)								
Load		10k $\Omega$ /10pF		50 $\Omega$								
Aging		$\pm 1 \times 10^{-6}$ /year										
Frequency Trim Range		$\pm 3 \times 10^{-6}$ min (*1)		$\pm 3 \times 10^{-6}$ min (*2)								
Case Code		21A		50C								

Note: \*1 By external variable resistor. Refer to FREQ. ADJ. shown in external symbol Fig. 21A.

\*2 In order to adjust the frequency, remove the screw lid and rotate the internal variable resistor using a screwdriver that fits the slot of the rotor. Please tighten the screw lid after completing the adjustment.

4 If you need NON-standard spec., please contact us.

### Dimensions



# TEMPERATURE COMPENSATED CRYSTAL OSCILLATORS 5900 SERIES

## Model 5930A

- Main applications: Communications equipment.
- Features
  - Compactness and light weight.
  - Stable frequency over wide frequency range
  - Low power consumption

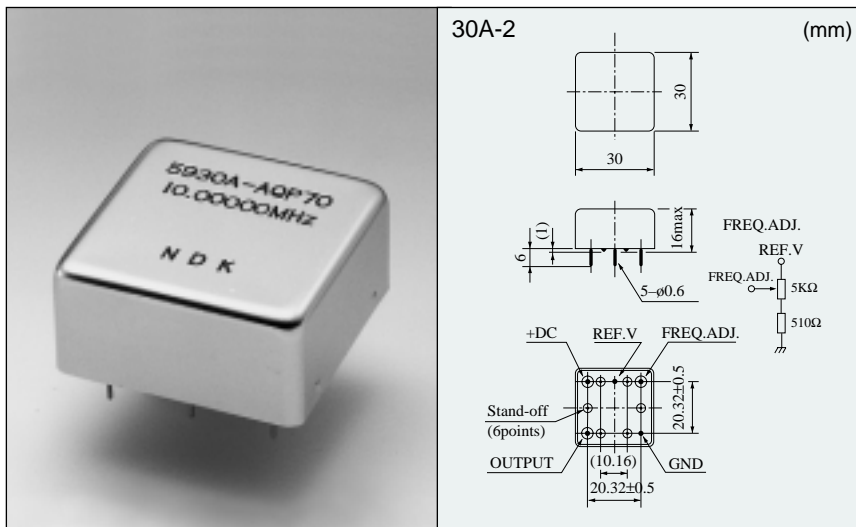
## Specification

Item	Model 5930A									
	Spec. Code	AKG00	ALH00	AML00	BKG00	BLH00	BML00	PKG00	PLH00	PML00
Standard Nominal Frequency (MHz)	20~25			25~60			60~150			
Frequency Stability	$\pm 1 \times 10^{-6}$	$\pm 1.5 \times 10^{-6}$	$\pm 2 \times 10^{-6}$	$\pm 1 \times 10^{-6}$	$\pm 1.5 \times 10^{-6}$	$\pm 2 \times 10^{-6}$	$\pm 1 \times 10^{-6}$	$\pm 1.5 \times 10^{-6}$	$\pm 2 \times 10^{-6}$	
	-20~+60°C	-20~+70°C	-30~+75°C	-20~+60°C	-20~+70°C	-30~+75°C	-20~+60°C	-20~+70°C	-30~+75°C	
Supply Volt Change	$\pm 0.2 \times 10^{-6} / +12V \pm 5\%$									
Supply Voltage	+12VDC									
Current Consumption	15mA max						40mA max			
Output Level	1mW min (0dBm min)									
Load	50Ω									
Aging	$\pm 1 \times 10^{-6} / \text{year}$									
Frequency Trim Range	$\pm 3 \times 10^{-6} \text{ min} (*)$									
Case Code	30A-2									

If you need NON-standard spec., please contact us.  
Refer to FREQ. ADJ. shown in external symbol Fig. 30A-2.

\*.....by external variable resistor  
Refer to FREQ. ADJ. shown in external symbol Fig. 30A-2.

## Dimensions



# CRYSTAL OSCILLATORS

## TEMPERATURE COMPENSATED CRYSTAL OSCILLATORS 5900 SERIES

### Model 5930D

- Main applications: Communications equipment.
- Features
  - Stable frequency over wide frequency range
  - Low power consumption

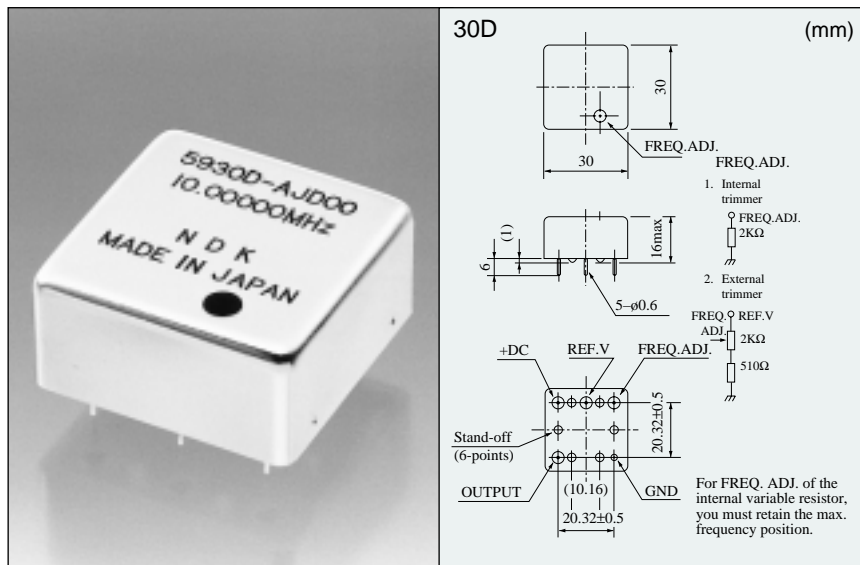
### Specification

Item	Model Spec. Code							
	AJD00	AKG00	ALH00	AML00	AJD70	AKG70	ALH70	AML70
Standard Nominal Frequency (MHz)	10~20							
Frequency Stability	$\pm 0.5 \times 10^{-6}$	$\pm 1 \times 10^{-6}$	$\pm 1.5 \times 10^{-6}$	$\pm 2 \times 10^{-6}$	$\pm 0.5 \times 10^{-6}$	$\pm 1 \times 10^{-6}$	$\pm 1.5 \times 10^{-6}$	$\pm 2 \times 10^{-6}$
	-10~+50°C	-20~+60°C	-20~+70°C	-30~+75°C	-10~+50°C	-20~+60°C	-20~+70°C	-30~+75°C
Supply Volt Change	$\pm 0.2 \times 10^{-6} / +12V \pm 5\%$				$\pm 0.2 \times 10^{-6} / +5V \pm 5\%$			
Supply Voltage	+12VDC				+5VDC			
Current Consumption	10mA max				15mA max			
Duty Cycle	—				40~60%(at+1.4V)			
Output Level	1mW min (0dBm min)				$V_{OL} : 0.4V \text{ max}, V_{OH} : 2.4V \text{ min}$			
Load	50Ω				N-TTL2			
Aging	$\pm 1 \times 10^{-6} / \text{year}$							
Frequency Trim Range	$\pm 3 \times 10^{-6} \text{ min} (*)$							
Case Code	30D							

If you need NON-standard spec., please contact us.

Refer to FREQ. ADJ. shown in external symbol Fig. 30D.

### Dimensions



# TEMPERATURE COMPENSATED CRYSTAL OSCILLATORS 5900 SERIES

## Model 5936A

## 5920A

- Main applications: Communications equipment.
- Features
  - Stable frequency over wide frequency range
  - Low power consumption

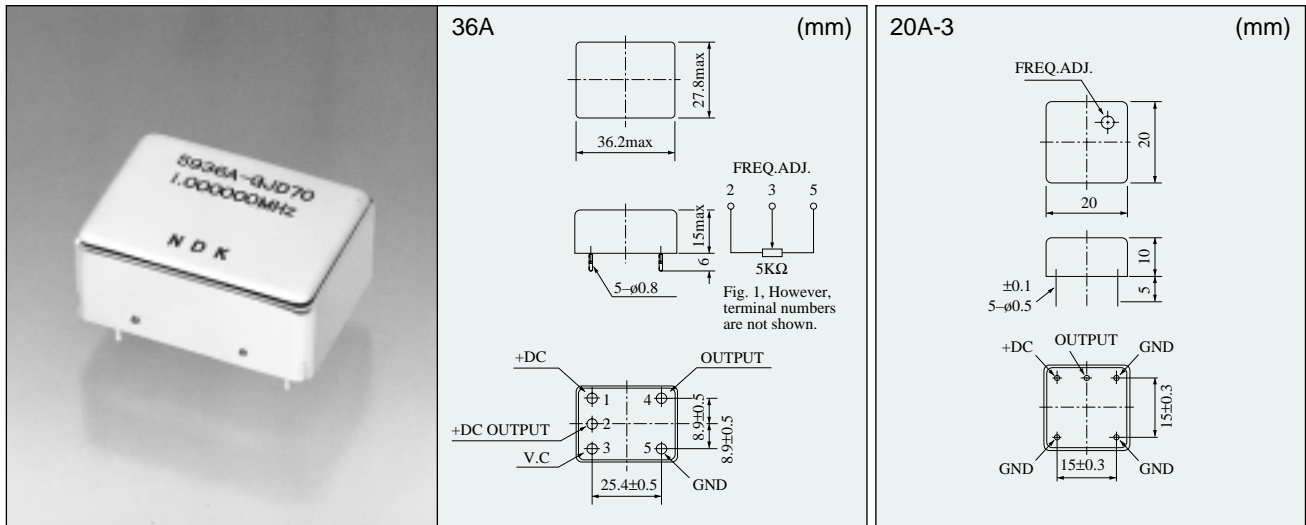
### Specification

Item	5936A		5920A	
	Spec. Code	Model	Spec. Code	Model
Nominal Frequency Range (MHz)	GJD70	AJD70	APG70	AQJ70
Frequency Stability	$\pm 0.5 \times 10^{-6}$		$\pm 3 \times 10^{-6}$	$\pm 5 \times 10^{-6}$
	-10~+50°C		-20~+60°C	-30~+60°C
Supply Volt Change	$\pm 0.2 \times 10^{-6} / +5V \pm 5\%$		$\pm 0.5 \times 10^{-6} / +5V \pm 5\%$	
Supply Voltage	+5VDC		+5VDC	
Current Consumption	18mA max		15mA max	
Output Level	V <sub>OL</sub> : 0.4V max, V <sub>OH</sub> : 2.4V min			
Load	N-TTL2			
Duty Cycle (+1.4V)	40~60%			
Aging	$\pm 1 \times 10^{-6}$ /year			
Frequency Trim Range	$\pm 3 \times 10^{-6}$ min (*)		$\pm 3 \times 10^{-6}$ min	
Case Code	36A		20A-3	

If you need NON-standard spec., please contact us.

\*.....by external variable resistor  
Refer to FREQ. ADJ. shown in external symbol Fig. 36A.

### Dimensions



# CRYSTAL OSCILLATORS

## TEMPERATURE COMPENSATED CRYSTAL OSCILLATORS (VC-TCXO) 5900 SERIES

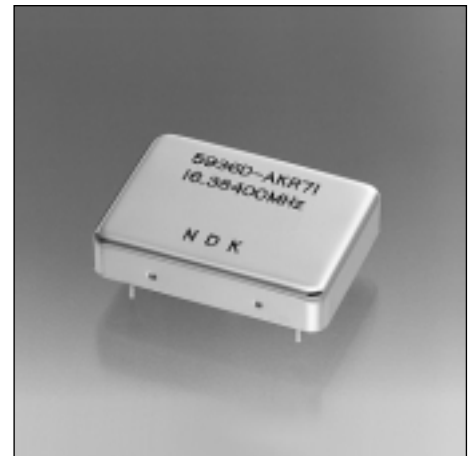
### Model 5936D

- Main applications : High speed/wide area ISDN (New synchronous transmission method)
- Features
  - Highly stabilized frequency temperature characteristics over specified frequency control range  $\pm 1 \times 10^{-6}$  max is realized.
  - Excellent design against humidity since package design is completely sealed type.

### Specification

Item	Model	5936D
Standard Nominal Frequency (MHz)		16.384
Frequency Tolerance		Adjustable to Nominal frequency at AFC=+2.5±0.3V
Frequency Stability/Temp. Range		$\pm 1 \times 10^{-6}$ max/0~+70°C (at +2.5±2V)
Supply Volt Change		$\pm 0.1 \times 10^{-6}$ max/DC+5V±5%
Supply Voltage		+5VDC±5%
Current Consumption		20mA max
Output Level		Drives TTL/C-MOS
Load	TTL	N-TTL2
	C-MOS	15pF max
Duty Cycle		40~60% (at +1.4V/at +2.5V)
Aging		$\pm 1 \times 10^{-6}$ max/year
AFC Charact./Polarity		$\pm 15 \times 10^{-6}$ min/+2.5±2V : Positive
Linearity		±10% max
Input Impedance		50kΩ min
Case Code		36D

If you need NON-standard spec., please contact us.



### Dimensions

