

## TCXO, VC-TCXO

### TCO-980, 987 Series

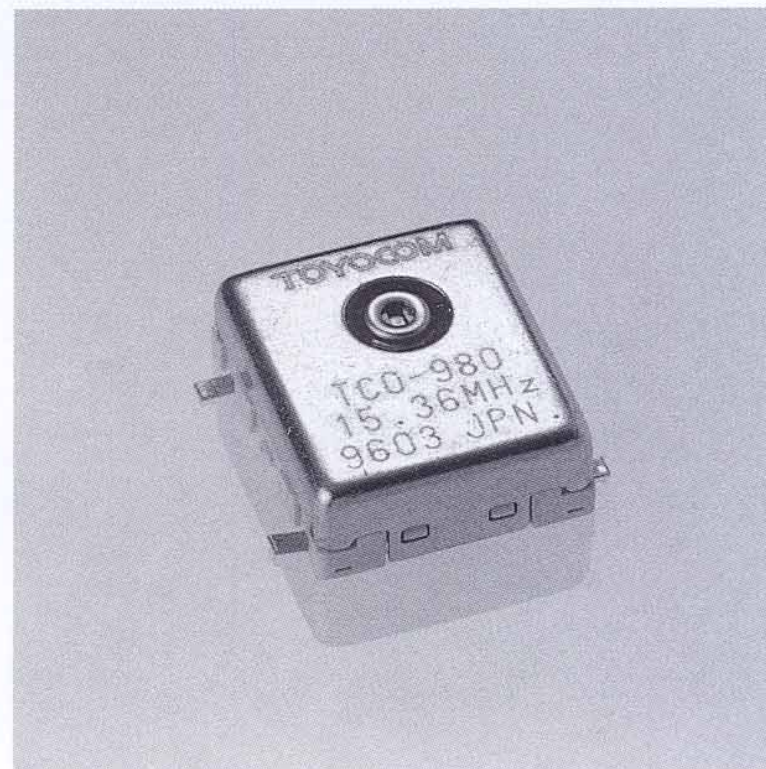
#### Features

- High-reliable miniaturized package (11.4 × 9.6 × 3.5mm height Max)
- Surface mountable
- Low SSB phase noise

#### Specifications

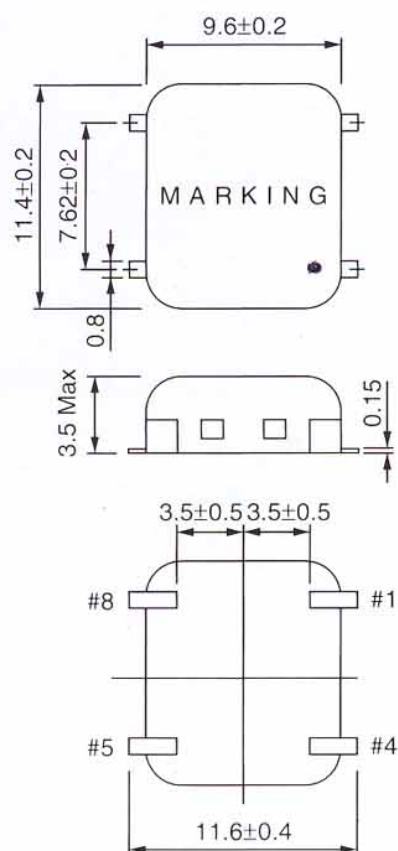
Type	TCXO		VC-TCXO	
	TCO-980, 981	TCO-982, 983	TCO-986, 987	
Frequency	12.8MHz, 13MHz, 14.4MHz, 15.36MHz, 16.8MHz, 19.44MHz, 19.68MHz			
Supply voltage	+3V ±5%			
Current drain	2mA Max			
Output level	0.8Vp-p Min (Load:10kΩ // 10pF)			
Stability vs Temperature	±2.5ppm Max / -30°C to +75°C (referred to +25°C)			
Stability vs Supply voltage	±0.3ppm Max / +3V ±5%			
Stability vs Load	±0.2ppm Max / (10kΩ ±1kΩ / 10pF ±1pF)			
Aging	±1ppm Max / year			
Frequency tolerance	±0.5ppm Max	±2.5ppm Max	±0.5ppm Max	
Frequency control range	Nothing	±5.0ppm Min / +1.5V ±1.0V		

Note : TCO-982, 983 Type (without trimmer capacitors)



#### Outline Drawing [mm]

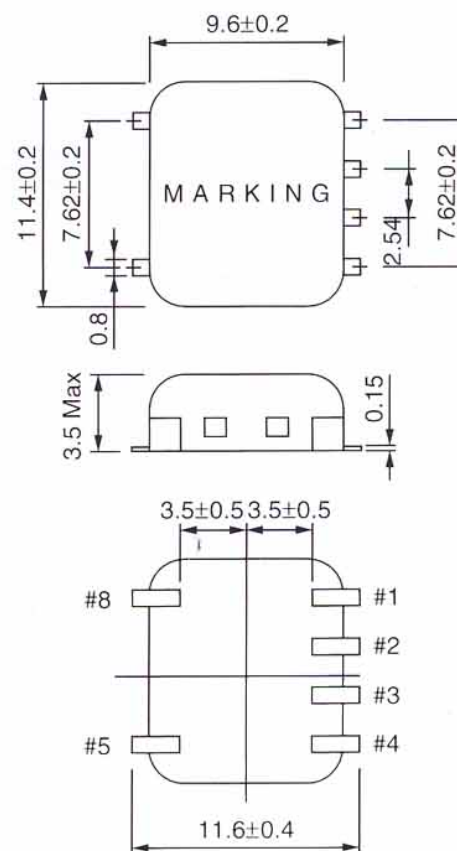
[TCO-980, 982, 986]



Pin connections

1	Output
4	Vcc
5	Vcont or NC
8	GND

[TCO-981, 983, 987]



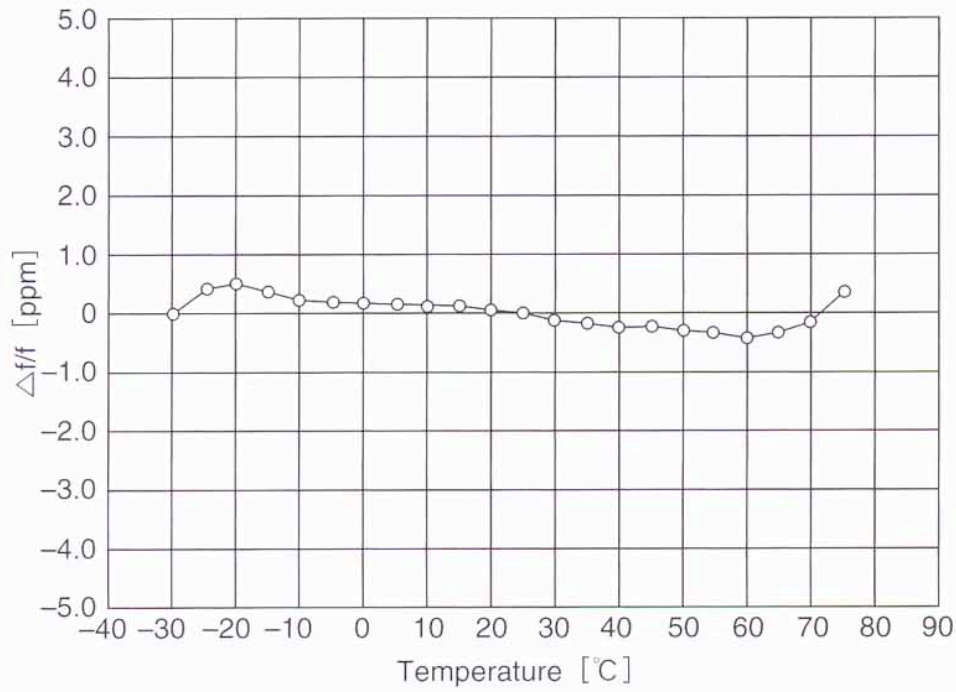
Pin connections

1	Output
2, 5, 8	GND/case
5	Vcont or NC
8	Vcc

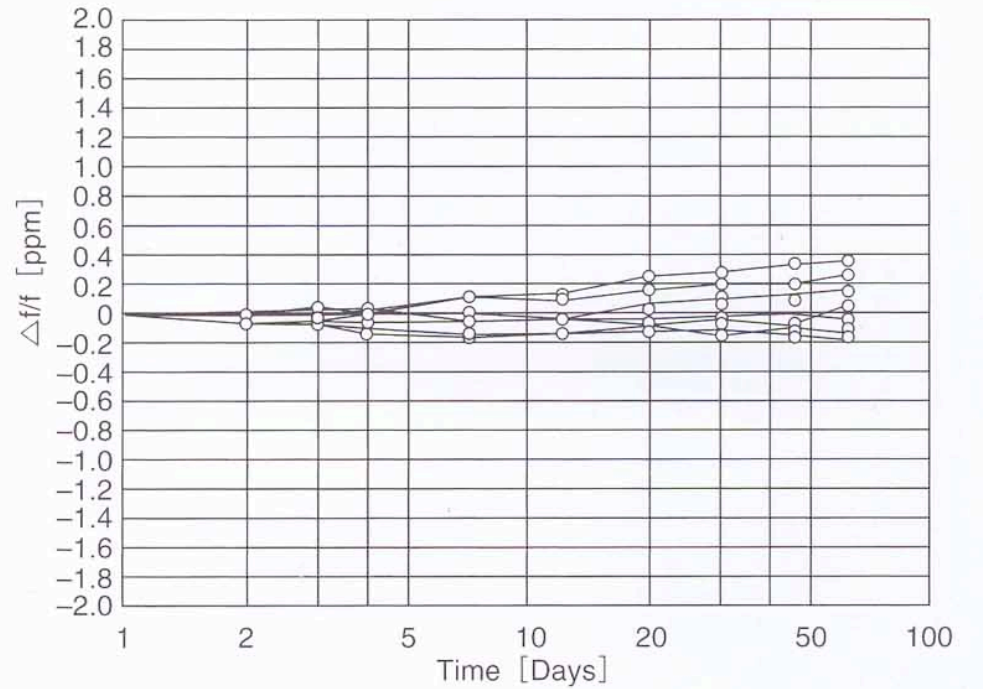
## Electrical Data

### TCO-987

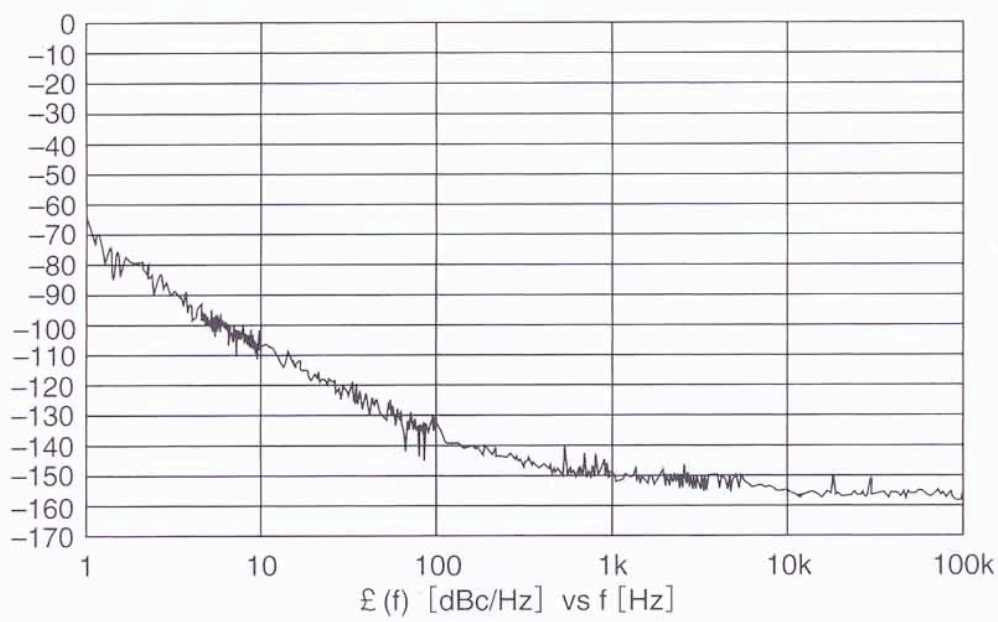
Frequency stability vs. temperature  
TCO-987 12.8MHz



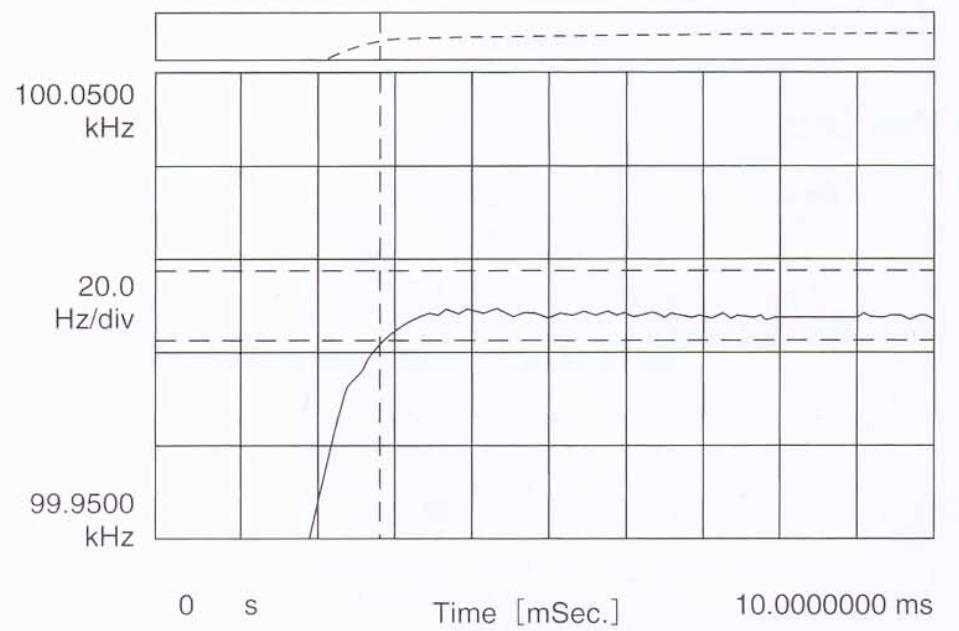
Accelerated aging characteristics at +85°C  
TCO-987 12.8MHz



TCO-987 12.8MHz SSB phase noise

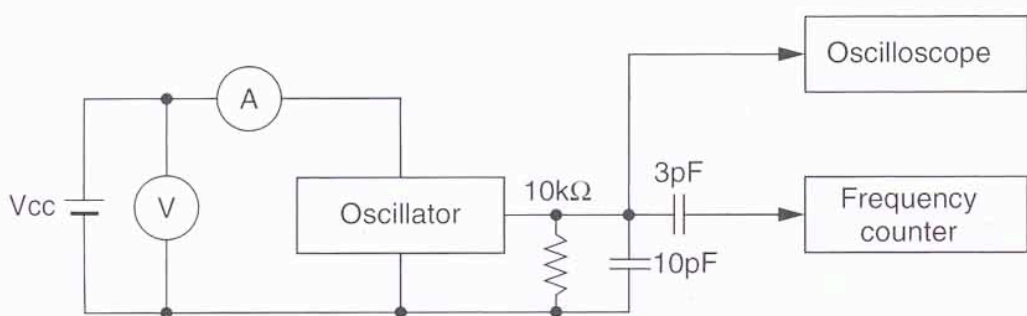


Rising time  
TCO-987 12.8MHz



## Test Circuit

### TCO-980/981



### TCO-986/987

