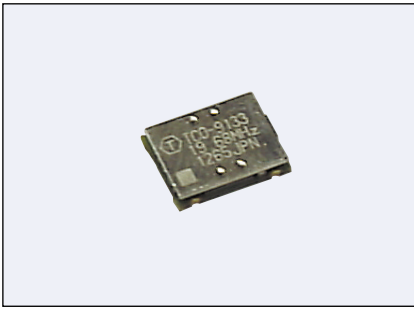


Temperature Compensated Crystal Oscillator (TCXO)



# TCO-9133 Series

0.06cc VC-TCXO

## Features

- Ultra miniature size : 7.0(W) X 5.2(D) X 1.7(H)mm
- Surface mounting is possible
- Low SSB phase noise (-140dBc/Hz @ 1kHz)

## Application

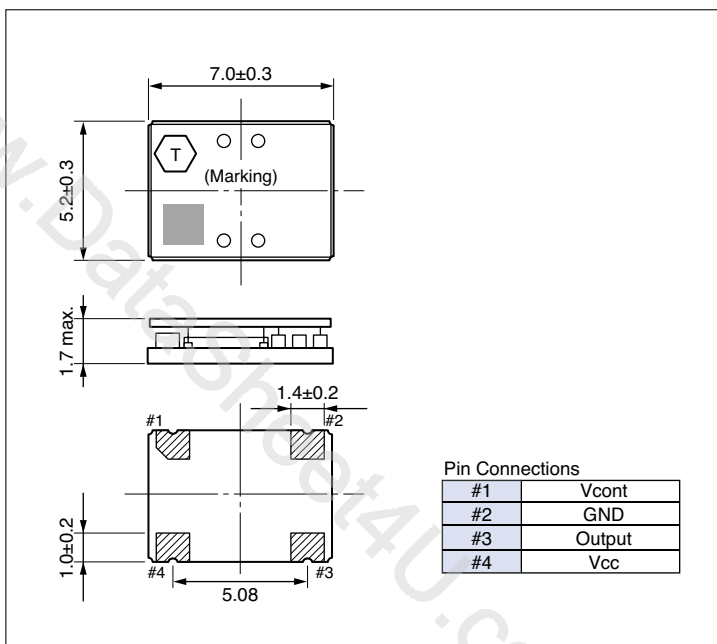
- Personal Cellular Phone (GSM, CDMA, TDMA)

## Specifications

Type	TCO-9133
Frequency	13 to 26 MHz
Supply voltage	+3 V $\pm$ 5 %
Supply current	2.0 mA max.
Output level	0.8 Vp-p min. (DC-cut, clipped sinewave) 10 k $\Omega$ // 10 pF
Stability vs Temperature	$\pm$ 2.5 ppm max. / -30 °C to +75 °C
Stability vs Supply voltage	$\pm$ 0.3 ppm max. / +3 V $\pm$ 5 %
Stability vs Load	$\pm$ 0.2 ppm max. / (Load: 10 k $\Omega$ $\pm$ 1 k $\Omega$ // 10 pF $\pm$ 1 pF)
Frequency tolerance	$\pm$ 2.5 ppm max. / +25 °C $\pm$ 2°C, after reflow
Aging	$\pm$ 1.0 ppm max. / year
Frequency control range	$\pm$ 8.0 ppm min. / +1.5 V $\pm$ 1.0 V

note)The above specifications are our standard. Upon request we offer proposal specifications separately.

## Package Outlines [Dimensions in mm]



## Footprint [Dimensions in mm]

