

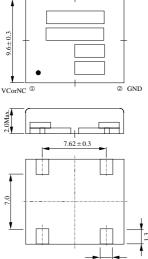
## Temperature Compensated Crystal Oscillator

TCXO and VCXO series are the Highly stable Crystal oscillators for mobile phones and automobile communications. Miniature type for smaller space can be flexibly applied for various customer requirements.

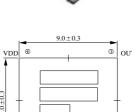
## Features

- Miniature size 0.2cc, 0.1cc and 0.06cc
- Surface mounting
- Low power
- Low phase noise

Dimensions TCXO-R2 TCXO-R1,VCXO-R1  $11.4 \pm 0.3$  $9.0 \pm 0.3$ 3 OUT 3 OUT VDD VDD @ VDD @ 4

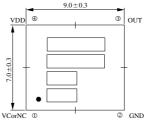


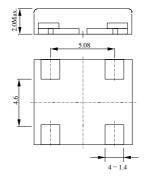
 $4 - 1.0 \pm 0.15$ 

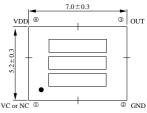


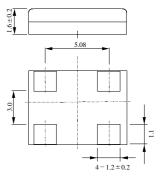












## Specifications

Item	TCXO-R1,R2	VCXO-R1	TCXO-R06	Unit	Note
Standard Frequency	12.8,13.0,19.2,19.44,19.68	13.0, 27.0	13.0, 19.20, 19.68	MHz	
Storage Temperature	-40 ~ +85	-40~+85	$-40 \sim +85$	°C	
Operating Temperature	- 30~ + 75	-20~+75	-30~+75	°C	
Power Supply	DC + 3.0, + 2.7	DC+3.0, +2.7	DC +3.0, +2.8	V	
Current	1.5Max.	1.5Max.	1.5Max.	mA	
Output	0.8Min.	0.8Min.	0.8Min.	Vp-p	
Loading	10kΩ//10pF	10kΩ//10pF	10kΩ//10pF		
Frequency Control Range	±7.0Min.	$\pm50 Min.,\pm20 Min.,\pm10 Min.$	$\pm 10$ Min.		$1.5 \pm 1 \text{V}$
Frequency Stability					
for Temperature	$\pm 2.5$	$\pm 8.0$	$\pm 2.5$		− 30~ + 75 °C
for Power Supply	$\pm 0.3$	$\pm 0.3$	$\pm 0.3$	ppm	
for Loading	$\pm 0.2$	$\pm 0.2$	$\pm 0.2$	_	10kΩ/10pF
for Aging	$\pm 1.0$	$\pm 1.0$	$\pm 1.0$		Year
Board Mount Area	1(TCXO – R2)	0.58	0.33		

Specifications which are different from those above may be acceptable.