

TCXO / VCTCXO 3,2 x 2,5 mm

High precision Temperature Compensated Crystal Oscillator
AKM IC independent products available

Features

Reflow solderable, ceramic SMD package base offers superior flatness.
Ultra-compact (3.2 x 2.5 x 1.0 mm), lowest height, light weight and low current consumption.

Applications

Suitable for cell phone, base station, GPS and mobile radio application. RoHS compliant

Specifications

Item	Symbol	Specifications		Conditions
		TCXO	(VC-TCXO)	
Output frequency	f_0	10.0 MHz to 56.0 MHz		
Supply voltage	Vcc	+1.8V to 3.6V		
Current consumption	Icc	2.0 mA max.		Vcc=3.0V , 10 kOhm//10 pF
Output voltage	Vpp	0.8V min.		NOTE1) DC coupling
Load	Load_R,C	10kOhm // 10 pF // 15pF		
Frequency stability				
/ Frequency tolerance	f_{tol}	$\pm 1.0 \times 10^{-6}$ max.		after reflow, @ 25 °C
/ Temperature	$f_{0_T_c}$	$\pm 0.5 \times 10^{-6}$ max.		-30 °C to +85 °C
/ Voltage coefficient	f_{0_Vcc}	$\pm 0.1 \times 10^{-6}$ max.		@ 3.0V $\pm$ 5%
/ Load coefficient	f_{0_Load}	$\pm 0.1 \times 10^{-6}$ max.		@ (10kOhm // 10pF) $\pm$ 5%
/ Frequency aging	f_{age}	$\pm 1.0 \times 10^{-6}$ max.		1 year, @ 25 °C
Frequency control range	f_{cont}	---	± 3 to $\pm 15 \times 10^{-6}$	Vc=1.5V $\pm$ 1.0V, positive polarity

NOTE 1) DC-cut capacitor of output is not put in TCXO. Please add DC-cut capacitor (1,000pF) in oscillator output line.

Phase Noise

Frequency Offset (Hz)	Phase Noise (dBc/Hz)
100	-110 typ.
1k	-130 typ.
10k	>-140 typ.
100k	>>-145 typ.

at $f_0=24.5535\text{MHz}$ (25 $\pm$ 2°C)

Please consult us for customized specifications.

Outline

