

TCXO / VCTCXO 5,0 x 3,2 mm

AKM independent products available

Features

Reflow solderable, ceramic SMD package base offers superior flatness.
Ultra-compact (5.0 x 3.2), lowest height, light weight and low current consumption type. RoHS compliant.

Applications

cell phone, base station, GPS and mobile radio, others

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 3,3V(3,6V)		
Current consumption	Icc	2.0 mA max.		Ccc=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, at 25 °C
/ Temperature	f_{0_Tc}	$\geq \pm 0.5 - 5.0 \times 10^{-6}$ max.		-30 °C to +85 °C, Vc=1.5V
/ Voltage coefficient	f_{0_Vcc}	$\pm 0.1 \times 10^{-6}$ max.		At 3.0V $\pm$ 5%
/ Load coefficient	f_{0_Load}	$\pm 0.1 \times 10^{-6}$ max.		at (10kOhm // 10pF) $\pm$ 5%
/ Frequency aging	f_{age}	$\pm 1.0 \times 10^{-6}$ max.		1 year, at 25 °C
Frequency control range	f_{cont}	---	± 3 to $\pm 5 \times 10^{-6}$	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.

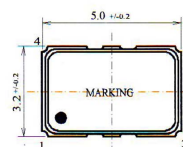
Phase Noise

Frequency Offset (Hz)	Phase Noise (dBc/Hz)
100	-110 typ.
1k	-135 typ.
10k	>-140 typ.
100k	>>-145 typ.

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

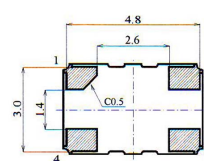
*Please consult us for customized specifications.

Outline

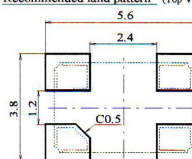


Pin Connections

- 1 : Vc (VSB)
- GND(NSB)
- 2 : GND
- 3 : OUTPUT
- 4 : Vcc



Recommended land pattern (Top View)



unit (mm)