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TTS14NSB / TTS14VSB-A8 => XTCLH-J / XTCLH-E

High Precision
(Voltage Controlled) Temperature Compensated Crystal Oscillator

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 . RoHS compliant.

Applications

cell phone, base station, GPS and mobile radio

Specifications

Item	Symbol	Specifications		Conditions
		TTS14NS_series (TCXO)	TTS14VS Series (VC-TCXO)	
Output frequency	f_0	10.0 MHz to 40.0 MHz		
Supply voltage	Vcc	+2.4V to 5.5V		
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		
Frequency stability				
/ Frequency tolerance	f_tol	±1.0x10^{-6} max.		after reflow, @ 25 °C
/ Temperature	f_0_T_c	≥ ±0.5x10^{-6} max.		-30 °C to +85 °C, Vc=1.5V
/ Voltage coefficient	f_0_Vcc	±0.2x10^{-6} max.		@ 3.0V ± 5%
/ Load coefficient	f_0_Load	±0.2x10^{-6} max.		@(10kOhm // 10pF) ± 5%
/ Frequency aging	f_age	±1.0x10^{-6} max.		1 year, @ 25 °C
Frequency control range	f_cont	---	±3 to ±5x10^{-6}	Vc=1.5V±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	-145 typ.
100k	-145 typ.

at f_0=24.5535MHz (25±2°C)

*Please consult us for customized specifications.

♦Outline