Crystal Oscillator

Crystal Bridge to the Future

Model Name 9740C — Oven-Controlled Crystal Oscillator (OCXO) 9700 Series

■ Main Application

Mobile communication base station

■ Features

- Excellent phase noise characteristics. (Compared to NDK' s existing products, phase noise characteristics have improved by 10 dB with the offset frequency at 1 kHz or more.)
- Excellent aging characteristics.

RoHS Compliant
Directive 2002/95/EC

■ Specifications

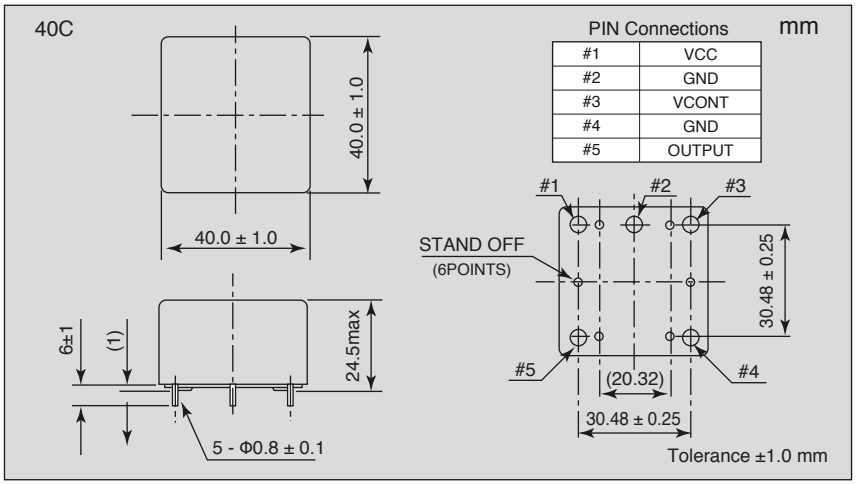
Item \ Model			9740C	
Item \ Classification			CDE01	BDE01
Standard nominal frequency (MHz)			5	10
Power supply voltage [VCC] (V)			+12 ±10 %	
Power consumption (W)			Max. 4.5	
Output level			Min. 1 mW (Min. 0 dBm)	Min. 5 mW (Min. 7 dBm)
Load (Ω)			50	
Operating temperature range (°C)			−10 to +60	
Frequency stability	Frequency warm-up characteristics	+25 °C twenty minutes after power is on Based on frequency after 60 minutes operation	Max. ±50×10^{-9}	
	Aging	Based on frequency after 48 hours operation	Max. ±0.5×10^{-9}/day	Max. ±2×10^{-9}/Day
		Based on frequency after 48 hours operation	Max. ±20×10^{-9}/year	Max. ±80×10^{-9}/Year
	Frequency / temperature characteristics	−10 °C to +60 °C	Max. ±20×10^{-9}	
	Power supply variation characteristics	VCC +12 V ±10 %	Max. ±2×10^{-9}	
Frequency control characteristics		+5.0 ±4.5 V	Min. ±0.3×10^{-6}	Min. ±1.0×10^{-6}
Control polarity			Positive	
Case code			40C	

*1 It is based on frequency after 48 hours operation.

■ Reference Value

	Offset frequency	CDE01	BDE01
Phase noise (dBc/Hz)	1 Hz	Max. −100	Max. −90
	10 Hz	Max. −130	Max. −120
	100 Hz	Max. −140	Max. −140
	1 kHz	Max. −150	Max. −150
	10 kHz	Max. −155	Max. −155

■ Dimensions



■ List of Ordering Codes

Frequency (MHz)	Ordering Code
5	9740C-5M-NSA3276A
10	9740C-10M-NSA3276B

The above frequencies are NDK's standard frequencies.
Frequencies other than the above are available.
Feel free to contact our sales representatives.