

TXO45, VTX45

TEMPERATURE-COMPENSATED CRYSTAL OSCILLATOR

SMD



TYPICAL APPLICATIONS

Computer control, Cordless telephone, Automobile telephone, Telecommunication

DIMENSION

21.3 x 12.0 x 5.0[mm]

TYPICAL SPECIFICATIONS

Model		TXO45	VTX45
Nominal Frequency range		9.6 ~ 45MHz	1.2 ~ 45MHz
Standard Frequency		9.6, 10.0, 12.8, 14.4, 16.384, 19.44, 20.00, 40.00, 44.736MHz	
Frequency Stability	Tolerance	$\pm 1.0 \times 10^{-6}$ Max. $F \leq 30$ MHz $\pm 2.0 \times 10^{-6}$ Max. $F > 30$ MHz	$\pm 1.0 \times 10^{-6}$ Max. $F \leq 30$ MHz $\pm 2.0 \times 10^{-6}$ Max. $F > 30$ MHz
	Temperature	$\pm 1.0 \times 10^{-6}$ $F \leq 34.9$ $\pm 2.5 \times 10^{-6}$ $F \leq 34.9$ $\pm 2.0 \times 10^{-6}$ $F > 34.9$ $\pm 3.5 \times 10^{-6}$ $F > 34.9$	$\pm 1.0 \times 10^{-6}$ $F \leq 34.9$ $\pm 2.5 \times 10^{-6}$ $F \leq 34.9$ $\pm 2.0 \times 10^{-6}$ $F > 34.9$ $\pm 3.5 \times 10^{-6}$ $F > 34.9$
Supply voltage		$\pm 0.3 \times 10^{-6}$ Max.	$\pm 0.5 \times 10^{-6}$ Max.
Aging		$\pm 1.0 \times 10^{-6}$ Max.	$\pm 1.0 \times 10^{-6}$ Max.
Temperature range	Operating	0°C ~ +50°C -30°C ~ +75°C	0°C ~ +50°C -30°C ~ +75°C
	Storage	-40°C ~ +85°C	-40°C ~ +85°C
Power Supply Voltage (VDC)		+3~+5V($\pm 5\%$)	+3~+5V($\pm 5\%$)
Current consumption		2.0(± 2.0)mA Max.: 9.6 ~ 20MHz	15mA Max.: $F \leq 20$ MHz
		3.0(± 2.0)mA Max.: 20.1 ~ 30MHz	25mA Max.: $F \leq 34.9$ MHz
		4.0(± 3.0)mA Max.: $F > 30$ MHz	30mA Max.: $F > 35$ MHz
Output	Load	10k Ω /10pF	15pF 2TTL
	Voltage	1.0Vp-p Min. 0.7Vp-p Min.	Vol:0.1Vcc Max. Vol:0.4 Max. Voh:0.9Vcc Min. Voh:2.4 Min.
	Symmetry		40 ~ 60% at 1/2Vcc 40 ~ 60% at 1.4V
	Waveform	Sine	Square/CMOS Square/TTL
	Phase Noise (at 1.0kHz) [dBc/Hz]	-140 Max. : $F < 12$ MHz ^{††} -140 Max. : $12 \leq F < 20$ MHz -135 Max. : $20 \leq F < 40$ MHz	-135 Max. : $F < 12$ MHz -130 Max. : $12 \leq F < 20$ MHz -125 Max. : $20 \leq F < 40$ MHz
Frequency Adjustment Trimmer		$\pm 3 \times 10^{-6}$	$\pm 3 \times 10^{-6}$
VTX:		$\pm 10 \times 10^{-6}$ Min./+2.5 ± 2 VDC	
Freq. Variable range/control voltage		$\pm 10 \times 10^{-6}$ Min./+1.65 ± 1.65 VDC	

* Please consult with us for other specification.

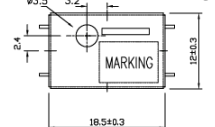
[†] Vcc: +3.3V

^{††} Performance vary based on different specification.

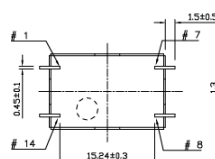
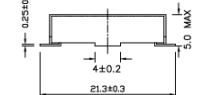
OUTLINE DIMENSIONS

Unit:mm

TXO-45



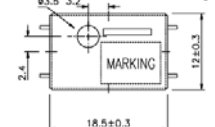
PIN NO	CONNECTION
# 14	+VCC
# 8	OUTPUT
# 7	GND
# 1	NC



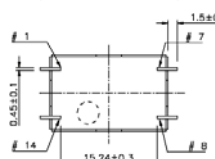
LAND PATTERN (REFERENCE)

SOLDER LAND

VTX-45



PIN NO	CONNECTION
# 14	+VCC
# 8	OUTPUT
# 7	GND
# 1	+VC



LAND PATTERN (REFERENCE)

SOLDER LAND