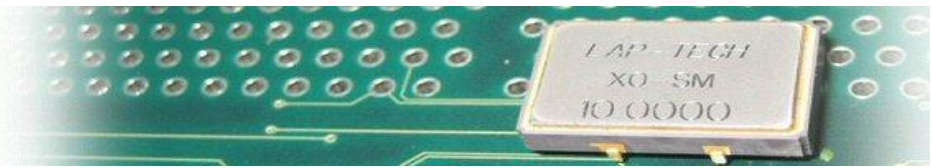




LAP-TECH INC.

"Focused on Frequency"



STANDARD FREQUENCY COMPONENTS SURFACE MOUNT STB & STE TCXO & TCVCXO

Description

TCXO, TCVCXO : STB, STE

Temperature Compensated Oscillator

Temperature Compensated Voltage Controlled Oscillator

1.200 MHz ~ 100.000 MHz frequency range

RoHS Compliant

Features

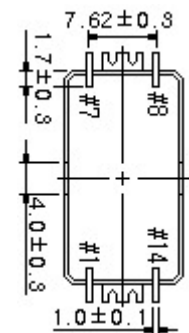
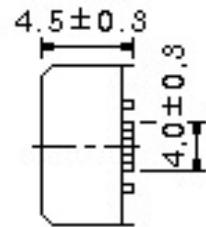
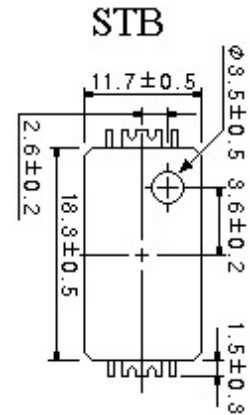
Positive supply voltage 3.3 V & 5V

PECL, LVDS compatible

Wide frequency range

Fundamental crystals

Exceptional Jitter performance



Electrical Specifications

Type:

Frequency Range:

Duty Cycle:

Internal Trim (Top of Can):

Frequency Deviation:

Control Voltage External:

TCXO & TCVCXO

1.200 MHz ~ 110.000 MHz

50 ± 10 %

± 3 ppm Min.

± 5 ppm or ± 10 ppm Min. Over Control Voltage

2.5 VDC ± 2.0 VDC (VDD: 5 VDC)

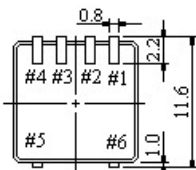
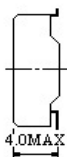
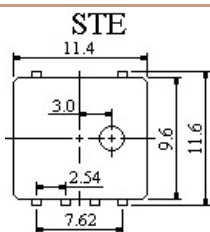
1.65 VDC ± 1.0 VDC (VDD: 3.3 VDC)

Positive Transfer Characteristics

± 1 ppm / Year Max.

Aging at 25 °C:

Parameters		Characteristics
Output	TTL/ HCMOS	CLIPPED SINEWAVE
Frequency Range	1.200 MHz ~ 100.000 MHz	9.600 MHz ~ 35.000 MHz
Load Drive Capability	10 TTL Load or 15 pF HCMOS Load Max.	10 k Ω / 10 pF
Output Voltage Logic High (VOH)	w/ TTL: 2.4 VDC Min.	1.0 Vp-p Min. (VDD: 5.0 VDC)
	w/ HCMOS: 90 % of VDD Min.	1.0 Vp-p Min. (VDD: 5.0 VDC)
Output Voltage Logic Low (VOL)	w/ TTL: 0.4 VDC Min	0.8 Vp-p Min. (VDD: 3.3 VDC)
	w/ HCMOS: 10 % of VDD Min.	0.8 Vp-p Min. (VDD: 3.3 VDC)
Frequency Stability	vs. Operating Temperature Range	± 1.5 ppm ~ 5.0 ppm Max.
	vs. Input Voltage (± 5 %)	± 0.3 ppm Max.
	vs. Load (± 10 %)	± 0.3 ppm Max.
Supply Voltage (VDD)	5.0 VDC ± 5 %	5.0 VDC ± 5 %
	3.3 VDC ± 5 %	3.3 VDC ± 5 %
Input Current	1.200 MHz ~ 27.000 MHz	9.600 MHz ~ 27.000 MHz
	20 mA Max. 15 mA Max.	2 mA Max. 1.5 mA Max.
	27.001 MHz ~ 100.000 MHz	27.001 MHz ~ 35.000 MHz
	35 mA Max. 30 mA Max.	3 mA Max. 1.5 mA Max.



PIN CONNECTION
#1 VCC #2 VC or NC #3 GND
#4 OUTPUT #5 GND #6 GND

PIN CONNECTION
#1 VC #7 GND
#8 OUTPUT #14 VCC

STB, STE (TCXO'S, TCVCXO'S)
1.200 MHz ~ 100.000 MHz