

MV-TC699A-1196Z Temperature Compensated Crystal Oscillator (TCXO) . This TCXO is a CMOS output device and comes in a FR4 base with metal cover 11.4x9.6mm package.

The device is qualified to meet the JEDEC standard for Pb-Free assembly and compliant to the RoHS directive.

Electrical Performance

Parameter	Min	Typ	Max	Units
General				
Output Frequency		100		MHz
Operating Temperature		-40/+85		°C
Frequency Stability				
Stability Over Temperature		±0.5		ppm
Initial Accuracy (25°C ±2°C)		±1.0		ppm
Power Supply Stability (±5% Change)			±0.2	ppm
Load Stability (±5% Change)			±0.1	ppm
Aging 1st year (after 30 days of operation)			±1.0	ppm
Root Allan Variance (1 sec Tau)			0.1	ppb
G Sensitivity (all 3 axis - 30Hz to 1500 Hz)			1.8	ppb/g
Package Size		11.4 x 9.6 x 5.0		mm
Supply				
Supply Voltage (Vdd)	3.14	+3.3	3.47	V
Supply Current			30	mA
Tuning				
Electrical Frequency Control (EFC)		No Tuning		
Output				
Output Signal		CMOS		
Output Logic Level				
Output Level - Logic High	Vdd x 0.9			V
Output Level - Logic Low			Vdd x 0.1	V
Output Load		15 pF		
Duty Cycle	45		55	%
Phase Noise & Jitter				
Phase Noise: (100 MHz)				
100 Hz offset		-107		dBc/Hz
1kHz offset		-130		dBc/Hz
10kHz offset		-145		dBc/Hz
100kHz offset		-150		dBc/Hz
Harmonics			-30	dBc

Maximum Ratings

Storage Temp	-55°C to 105°C
Supply Voltage	-0.5V to Vdd+10%

Maximum Ratings Notes:

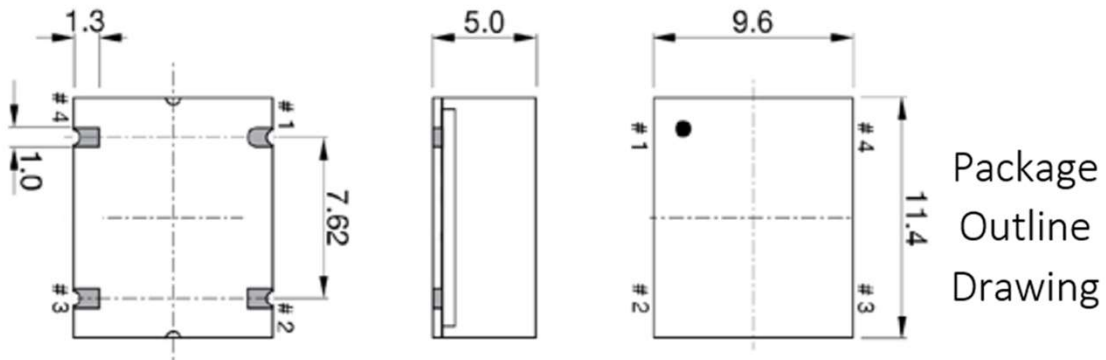
- 1 Stresses in excess of the absolute maximum ratings can permanently damage the device.
- 2 Exposure to absolute maximum ratings for extended periods may adversely affect device reliability.

Package Information

Pin #	Function
Pin 1	GND = Ground
Pin 2	GND = Ground
Pin 3	OUT = Output
Pin 4	Vdd = Supply Voltage

Package and Assembly Notes:

- 1 Able to withstand normal solder reflow processes



Handling and Construction

Package Construction	FR4 base with metal cover
ESD, Human Body Model	500V
ESD, Charge Device Model	500V

Ordering Information

MV-TC699A-1196Z - B K R X - 100M0000

TCXO, CMOS

11.4 x 9.6 x 5.0mm, 4 Pins

① ② ③ ④

Frequency

① Voltage

B: 3.3 V

② Temp Range

K: -40/+85 °C

③ Temp Stability

R: ±0.5 ppm

④ Tuning Range

X: No Tuning