

MV-TS642-1495X is a Temperature Compensated Crystal Oscillator (TCXO) . This TCXO is analog temperature compensated, Clipped Sine Wave output device and comes in a FR4 base with metal cover 14.4x9.5mm 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	6.4		60	MHz
Operating Temperature		-20/+70 to -40/+85		°C
Frequency Stability				
Stability Over Temperature		±1.0 to ±0.28		ppm
Initial Accuracy (25°C ±2°C)			±1.0	ppm
Power Supply Stability (±5% Change)			±0.2	ppm
Load Stability (±10% Change)			±0.1	ppm
Aging / year (after 30 days of operation)			±1.0	ppm/year
Package Size		14.4 x 9.5 x 5.9		mm
Supply				
Supply Voltage (Vdd)		+3.3 to +5.0		V
Supply Current			35	mA
Tuning				
Tuning (Pull) Range		±5 to ±8		ppm
Tuning Slope		Positive		
Control Voltage to reach Pull Range	0.3		3	V
Linearity		< 10		%
Control Voltage Impedance	10			KΩ
Output				
Output Signal		Clipped Sine Wave		
Output Logic Level				
Output Level - Logic High	0.7			V
Output Load		10KΩ 10pF		

Notes:

- 1 Frequency Tuning (EFC) available from 6.4MHz to 26 MHz
- 2 For stability under ±0.5ppm, only ±5ppm EFC available
- 3 SMD oscillators must be on the top side of the PCB during the reflow process.

Maximum Ratings

Storage Temp	-40°C to 105°C
Supply Voltage	0V to +6.0V

Maximum Ratings Notes:

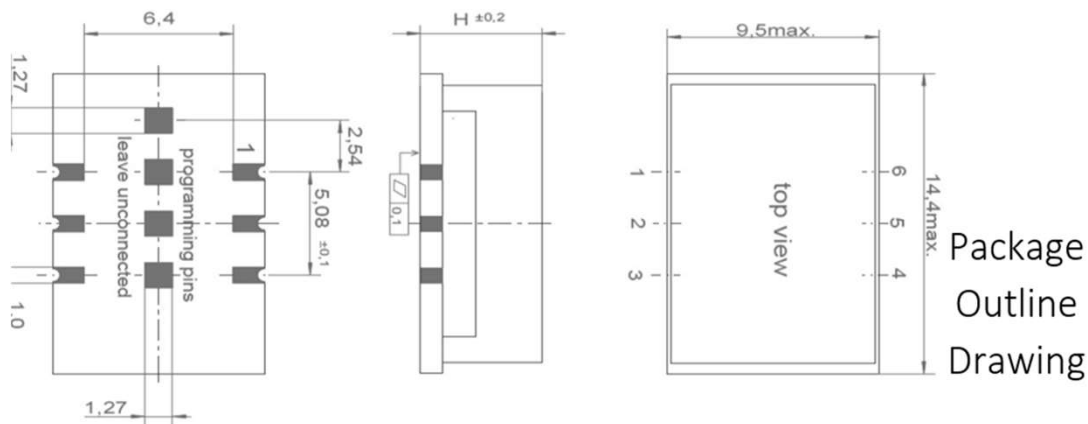
- 1 Stresses in excess of the absolute maximum ratings can permanently damage the device.
- 2 Exposure to absolute maximum ratings for extended periods may adversely affect device reliability.

Package Information

Pin #	Function
Pin 1	Vc = Control Voltage or NC
Pin 2	NC = Make No Connection
Pin 3	GND = Ground
Pin 4	OUT = Output
Pin 5	NC = Make No Connection
Pin 6	Vdd = Supply Voltage

Package and Assembly Notes:

- 1 H = 2.8 mm





Package
Outline
Drawing

Handling and Construction

Package Construction	FR4 base with metal cover
Washable	non-washable device
RoHS compliance	100% ROHS 6 compliant
Moisture Sensitivity Level	MSL 1
ESD	HBM JESD22-A114-F Class 1C 10* 2000V

Ordering Information

MV-TS642-1495X -

TCXO, Clipped Sine Wave 
 14.4 x 9.5 x 5.9mm, 6 Pins 

X X X X
 ① ② ③ ④

- **xxMxxxxx**
 Frequency 

① Voltage

A: 5.0 V
 B: 3.3 V

② Temp Range

H: -20/+70 °C
 K: -40/+85 °C

③ Temp Stability

Q: ±1.0 ppm
 R: ±0.5 ppm
 S: ±0.28 ppm

④ Tuning Range

X: No Tuning
 L: ±5 ppm
 K: ±8 ppm

Part Number Configuration Notes:

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