

# MTA, MTC, MVTA & MVTC Series

## SMD TCXO & VCTCXO

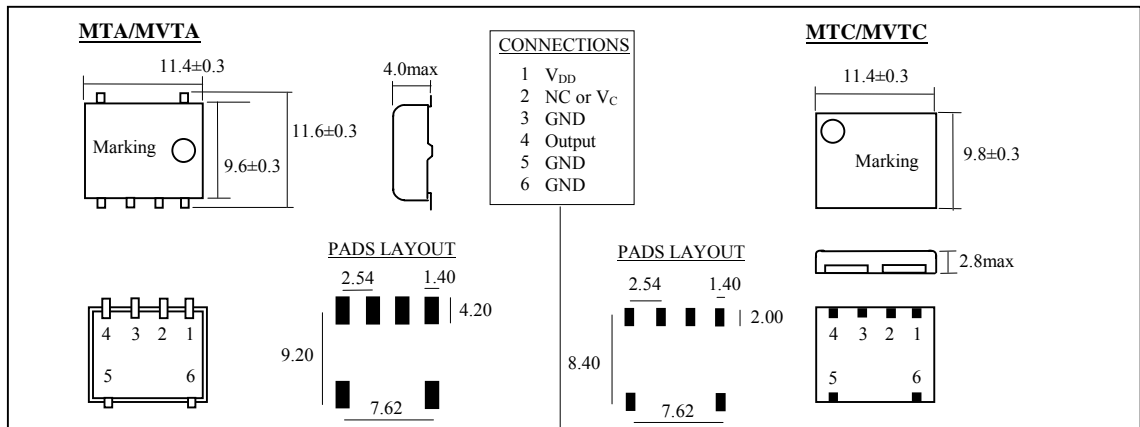
- FEATURES**
- . Surface Mount Miniature Packages
  - . Wide Frequency & Temperature. Range
  - . 5V, 3.3V, 3V Operation

### SPECIFICATIONS

(subject to change w/o notice)

Parameters	TTL/HCMOS	Clipped Sinewave
Frequency Range	1.2MHz ~ 35MHz	9.6MHz ~ 35MHz
Frequency Stability 25°C Ref. (Max)	±1ppm ~ 5ppm per operating temperature range; ±0.3ppm/Supply; ±0.3ppm/ Load; ±1ppm aging/1 <sup>st</sup> yr	±1ppm ~ 5ppm per operating temperature range; ±0.3ppm/Supply; ±0.3ppm/ Load; ±1ppm aging/1 <sup>st</sup> yr
Internal Trim (Min)	±3ppm	±3ppm
Operating Temp.	0°C ~ +50°C to -40°C ~ +85°C	0°C ~ +50°C to -40°C ~ +85°C
Storage Temp.	-40°C ~ +85°C	-40°C ~ +85°C
Supply Voltage V <sub>DD</sub>	V <sub>DD</sub> : 5V, 3.3V, 3V ± 5%	V <sub>DD</sub> : 5V, 3.3V, 3V ± 5%
Supply Current (Max)	20mA @ 5V V <sub>DD</sub> ; 15mA @ 3.3V, 3V V <sub>DD</sub>	2mA @ 5V V <sub>DD</sub> ; 1.5mA @ 3.3V, 3V V <sub>DD</sub>
Output Load (Max)	10 TTL/15pF HCMOS	10KΩ // 10pF
Output Voltage	V <sub>OL</sub> = 0.4V/10% of V <sub>DD</sub> max, TTL/HCMOS load V <sub>OH</sub> = 2.4V/ 90% of V <sub>DD</sub> min, TTL/HCMOS load	1.0Vpp Min @ V <sub>DD</sub> : 5V 0.8Vpp Min @ V <sub>DD</sub> : 3.3/3V
Rise/Fall Time (Max)	5.0ns	5ns
Control Voltage V <sub>C</sub>	2.5V±2.0V, 1.65V±1.0V, 1.5±1.0V @ 5/3.3/3V V <sub>DD</sub>	2.5V±2.0V; 1.65V±1.0V; 1.5±1.0V @ 5/3.3/3V V <sub>DD</sub>
Frequency Control	±5ppm ~ ±20ppm min; positive slope	±5ppm ~ ±20ppm min; positive slope
Phase Noise (Max)	-145, -135, -115dB/Hz @ 10KHz/1KHz/100Hz	-145, -135, -115dB/Hz @ 10KHz/1KHz/100Hz

### OUTLINE (mm) not to scale



### PART NUMBERING

Model	Supply	Frequency	Stability	Temperature Range	Output	Other Options
MTA	5: 5V	MHz	±PPM	Blank: -10C ~ +60C	Blank: CMOS/TTL	Custom Inquiries
MVTA	3.3: 3.3V	Value	Value	M: -20C ~ +70C	H: HCMOS	
MTC	3: 3V			N: -30C ~ +75C	S: Sinewave	
				J: -40C ~ +60C		
				K: -40C ~ +75C		
				I: -40C ~ +85C		
<b>Example: MVTA5-20.000-2.5M</b>				<b>Please Consult Microcom Devices Ltd. for Custom Specifications</b>		