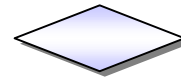


# MTE & MVTE Series

## SMD TCXO & VCTCXO



**Microcom**  
Devices Ltd.

### FEATURES

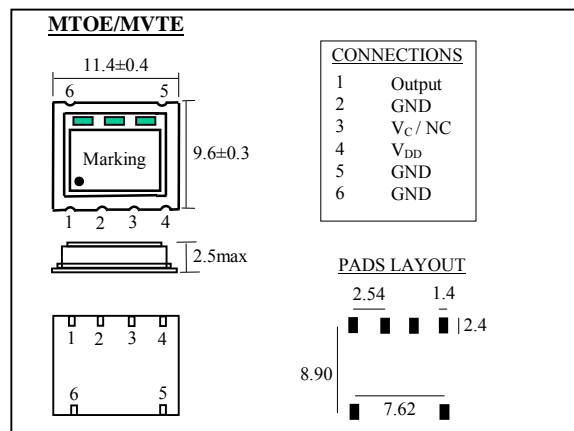
- . Surface Mount Packages
- . Wide Frequency & Temperature. Range
- . 5V, 3.3V, 3V Operation

### SPECIFICATIONS (subject to change w/o notice)

Parameters	TTL/HCMOS	Clipped Sinewave
Frequency Range	9.6MHz ~ 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
Frequency Tolerance	±2.5ppm at 25°C (±1ppm optional) no trimmer	±2.5ppm at 25°C (±1ppm optional) no trimmer
Tolerance Trim	Trimmer option with ±3ppm min adjustment	Trimmer option with ±3ppm min adjustment
Operating Temp.	0°C ~ +50°C to -40°C ~ +85°C	0°C ~ +50°C to -40°C ~ +85°C
Storage Temp.	-45°C ~ +100°C	-45°C ~ +100°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	3 ~ 10mA	2 ~ 3mA
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)	5.0nsec	5nsec
Control Voltage V <sub>C</sub>	2.5V±2.0V @ 5V V <sub>DD</sub> , 1.5±1.0V @ 3.3/3V V <sub>DD</sub>	2.5V±2.0V @ 5V V <sub>DD</sub> , 1.5±1.0V @ 3.3/3V V <sub>DD</sub>
Frequency Control	±5 ~ 12ppm; ±10% non-linearity; positive slope	±5 ~ 12ppm; ±10% non-linearity; positive slope
Phase Noise (Max)	-145, -135, -115dBc/Hz @ 10KHz/1KHz/100Hz	-145, -135, -115dBc/Hz @ 10KHz/1KHz/100Hz

### OUTLINE

(mm) not to scale



### PART NUMBERING

Model	Supply	Frequency	Stability	Temperature Range	Output	Other Options
MTE	5: 5V	MHz	±PPM	Blank: -10C ~ +60C	Blank: CMOS/TTL	Custom Inquiries
MVTE	3.3: 3.3V	Value	Value	M: -20C ~ +70C	H: HCMOS	
	3: 3V			N: -30C ~ +75C	S: Sinewave	
				J: -40C ~ +60C		
				K: -40C ~ +75C		
				I: -40C ~ +85C		
<b>Example: MVTE5-20.000-2.5J</b>				<b>Please Consult Microcom Devices Ltd. for Custom Specifications</b>		