

**MTB, MTD, MVTB & MVTD Series
SMD TCXO & VCTCXO**

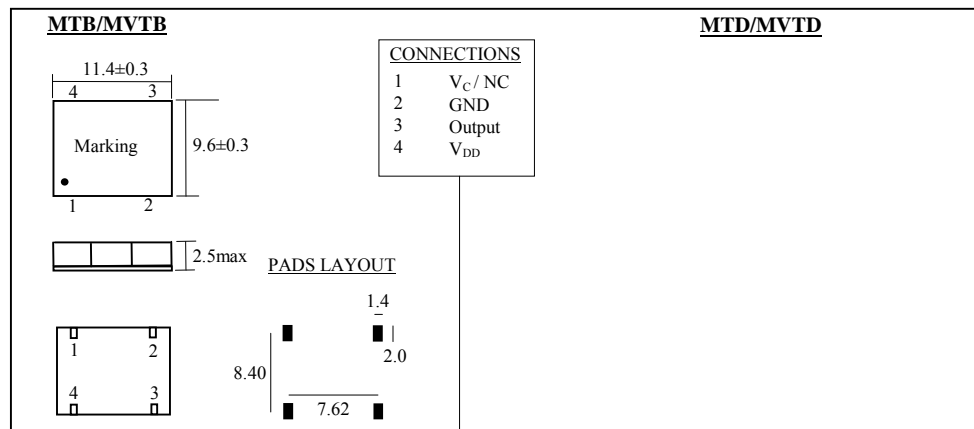
- FEATURES**
- . Surface Mount Packages
 - . Wide Frequency & Temperature. Range
 - . 5V, 3.3V, 3V Operation

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 st yr	±1ppm ~ 5ppm per operating temperature range; ±0.3ppm/Supply; ±0.3ppm/ Load; ±1ppm aging/1 st yr
Internal Trim	±3ppm min	±3ppm min
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 _{DD}	V _{DD} : 5V, 3.3V, 3V ± 5%	V _{DD} : 5V, 3.3V, 3V ± 5%
Supply Current (Max)	2mA	2mA
Output Load (Max)	10 TTL / 15pF HCMOS	10KΩ // 10pF
Output Voltage	V _{OL} = 0.4V/10% of V _{DD} max, TTL/HCMOS load V _{OH} = 2.4V/ 90% of V _{DD} min, TTL/HCMOS load	1.0Vpp min @ V _{DD} : 5V 0.8Vpp min @ V _{DD} : 3.3/3V
Rise/Fall Time (Max)	5.0ns	5ns
Control Voltage V _C	2.5V±2.0V @ 5V V _{DD} , 1.5±1.0V @ 3.3/3V V _{DD}	2.5V±2.0V @ 5V V _{DD} , 1.5±1.0V @ 3.3/3V V _{DD}
Frequency Control	±5ppm ~ ±12ppm min; positive slope	±5ppm ~ ±12ppm min; 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
MTB	5: 5V	MHz	±PPM	Blank: -10C ~ +60C	Blank: CMOS/TTL	Custom Inquiries
MVTB	3.3: 3.3V	Value	Value	M: -20C ~ +70C	H: HCMOS	
MTD*	3: 3V			N: -30C ~ +75C	S: Sinewave	
MVTD*				J: -40C ~ +60C		
				K: -40C ~ +75C		
				I: -40C ~ +85C		
Example: MVTB5-20.000-2.5M				Please Consult Microcom Devices Ltd. for Custom Specifications		