

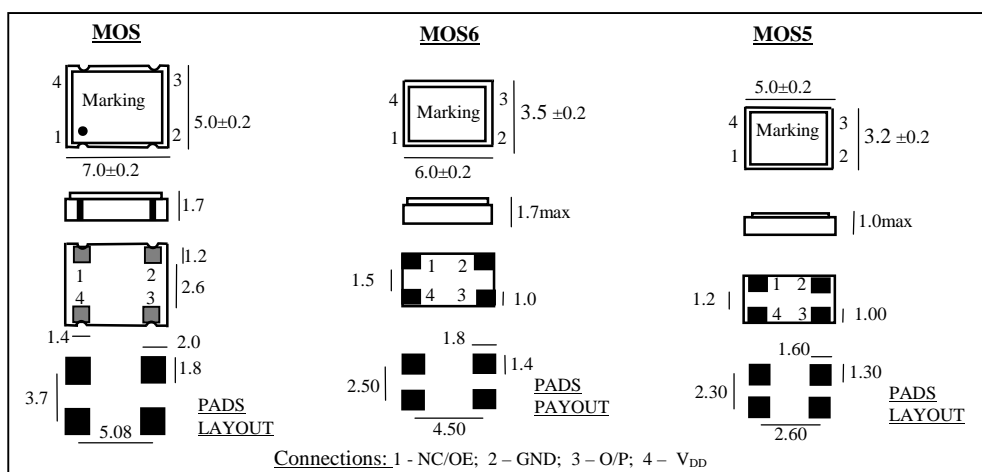
MOS Series
Miniature Surface Mount Crystal Oscillators

- FEATURES**
- . Low-Profile Ceramic SMD (3 sizes)
 - . Wide Frequency & Temperature. Range
 - . Low Power/ Tri-State Option

SPECIFICATIONS (subject to change w/o notice)

Parameters	5V	3.3V (3V, 2.5V, 1.8V)
Frequency Range	1.000MHz ~ 125.000MHz	1.000MHz ~ 175.000MHz
Operating Temp.	0°C ~ +70°C to -40°C ~ +85°C	0°C ~ +70°C to -40°C ~ +85°C
Storage Temp.	-55°C ~ +125°C	-55°C ~ +125°C
Supply Voltage	V _{DD} : 5V ± 10%	V _{DD} : 3.3V (3V, 2.5V, 1.8V) ± 10%
Supply Current (max)	25mA over 1MHz ~ 35MHz 40mA over 36MHz ~ 60MHz 60mA over 61MHz ~ 125MHz	20mA over 1MHz ~ 50MHz 35mA over 51MHz ~ 90MHz 50mA over 91MHz ~ 175MHz
Frequency Stability	±20 ~ 100ppm (includes 25°C tolerance & changes due to temperature, supply, load, vibrations, etc.)	±20 ~ 100ppm (includes 25°C tolerance & changes due to temperature, supply, load, vibrations, etc.)
Output Load (max)	10TTL/50pF HCMOS for 1 ~ 70Hz 10 TTL/15pF HCMOS for 71 ~ 125MHz	15pF HCMOS
Output Level	V _{OL} = 0.4V/10% of V _{DD} max, TTL/HCMOS load V _{OH} = 2.4V/ 90% of V _{DD} min, TTL/HCMOS load	V _{OL} = 10% of V _{DD} max, HCMOS load V _{OH} = 90% of V _{DD} min, HCMOS load
Duty Cycle	40/60% ~ 45/55%	40/60% ~ 45/55%
Rise/Fall Time (max)	2ns @ 100MHZ ~10ns @ 1MHz	2ns @ 100MHZ ~10ns @ 1MHz
Start-up Time (max)	10 ms	10 ms
Tri-State (100ns max E/D Time) I/P	NC or V _{IH} of 2.0V or higher enables O/P V _{IL} of 0.7V or lower disables O/P, high impedance	NC or V _{IH} of 2.0V or higher enables O/P V _{IL} of 0.7V or lower disables O/P, high impedance
Period Jitter (max)	±100ps absolute; 25ps one-sigma	±100ps absolute; 25ps one-sigma

OUTLINE
(mm) not to scale



PART NUMBERING

Model	Supply	Frequency	Stability	Temperature	Duty Cycle	Output	Tri-State	Packaging
MOS	5: 5V	MHz	±PPM	Blank: 0C ~ +70C	Blank: 40/60	Blank: CMOS/TTL	Blank: NC	Blank: Bulk
MOS6	3.3: 3.3V	Value	Value	M: -20C ~ +70C	T: 45/55	H: HCMOS	Z: Tri-State	R: Tape & Reel
MOS5	3: 3V			N: -30C ~ +75C				
	2: 2.5V			I: -40C ~ +85C				
	1: 1.8V							
Example: MOS3-16.384-50IT			Please Consult Microcom Devices Ltd. for Custom Specifications					