

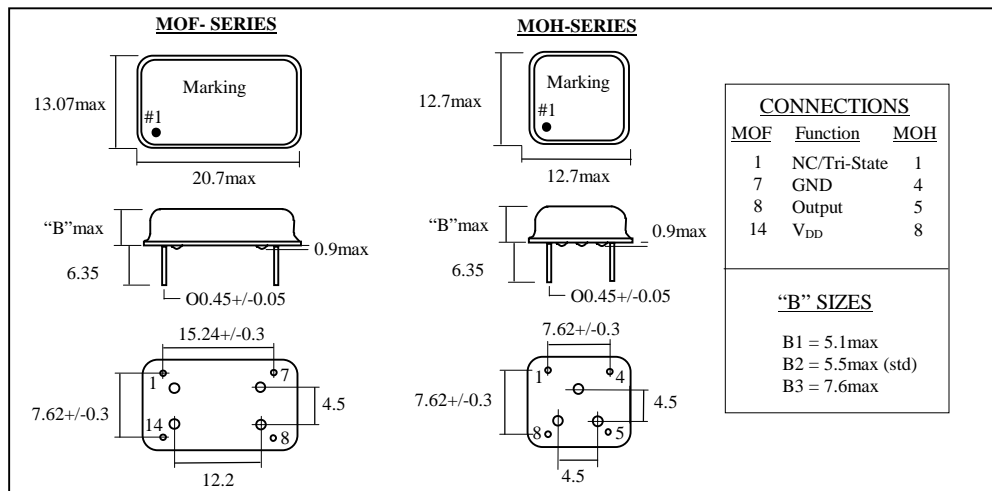
**MOF & MOH Series**  
**DIP-14/DIP-8 Crystal Oscillators**

- FEATURES**
- Hermetically Sealed Metal in Thru-Hole Packages (Gull-Wing & SMD Options)
  - 5V & 3.3V Supplies, HCMOS/TTL, Tri-State O/P, Wide Freq & Temp Range

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

Parameters	5V	3.3V
Frequency Range	32.768KHz ~ 160MHz	32.768KHz -500KHz ~ 125MHz
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 <sub>DD</sub> : 5V ± 10%	V <sub>DD</sub> : 3.3V ± 10%
Supply Current (max)	30mA @ 25MHz ~ 85mA @ 160MHz	20mA @ 25MHz ~ 75mA @ 125MHz
Disable Current (max)	100µA (Pin 1 @ GND)	100µA (Pin 1 @ GND)
Standby Current (max)	50µA (Pin 1 @ GND)	50µA (Pin 1 @ GND)
Frequency Stability	±15 ~ 100ppm (includes 25°C tolerance & changes due to temperature, supply, load, vibrations, etc.)	±15 ~ 100ppm (includes 25°C tolerance & changes due to temperature, supply, load, vibrations, etc.)
Aging (max)	±5ppm/year	±5ppm/year
Output Load (max)	10TTL/50pF for 32.768KHz ~ 25MHz 10 TTL/15pF for 25 ~ 160MHz	15pF HCMOS
Output Level	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	V <sub>OL</sub> = 10% of V <sub>DD</sub> max, HCMOS load V <sub>OH</sub> = 90% of V <sub>DD</sub> min, HCMOS load
Duty Cycle	40/60% ~ 45/55%	40/60% ~ 45/55%
Period Jitter (max)	100psec Absolute; 25psec One-Sigma	100psec Absolute; 25psec One-Sigma
Rise/Fall Time (max)	2ns @ 100MHz ~10ns @ 1MHz	2ns @ 100MHz ~10ns @ 1MHz
Start-up Time	10 msec max	10 msec max
Tri-State (100nsec max E/D Time) I/P	NC or V <sub>IH</sub> of 2.0V or higher enables O/P V <sub>IL</sub> of 0.8V or lower disables O/P, high impedance	NC or V <sub>IH</sub> of 2.0V or higher enables O/P V <sub>IL</sub> of 0.8V or lower disables O/P, high impedance

**OUTLINE**  
(mm) not to scale



**PART NUMBERING**

Model	Supply	Freq	Stability	Temperature	Duty Cycle	Output	Tri-State	Other Options
MOF	5/Blank: 5V	MHz	±PPM	Blank: 0C ~ +70C	Blank: 40/60	Blank: CMOS/TTL	Blank: NC	Gull-Wing SMD
MOH	3.3: 3.3V	Value	Value	M: -20C ~ +70C N: -30C ~ +75C I: -40C ~ +85C	T: 45/55	H: HCMOS	Z: Tri-State	Custom
<b>Example: MOF5-7.3728-50I</b>				<b>Please Consult Microcom Devices Ltd. for Custom Specifications</b>				