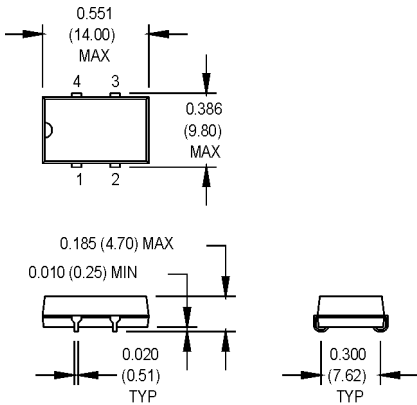


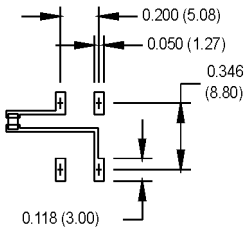
# M3R Series

9x14 mm, 3.3 Volt, HCMOS/TTL, Clock Oscillator



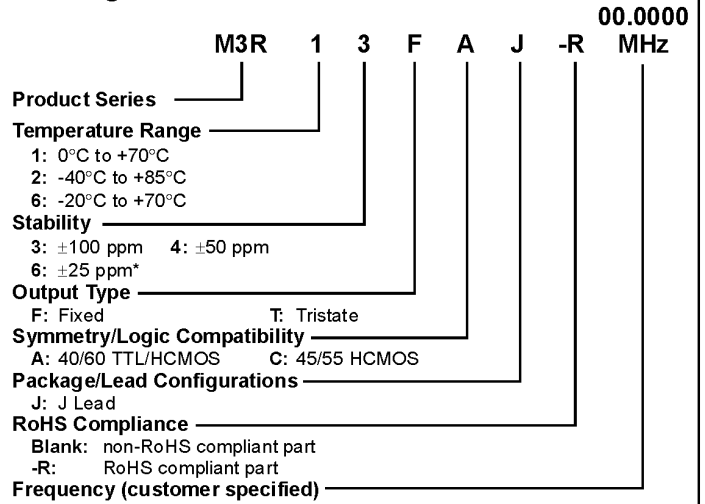
All dimensions in inches (mm).

### SUGGESTED SOLDER PAD LAYOUT



**NOTE:** A capacitor of value 0.01  $\mu$ F or greater between Vdd and Ground is recommended.

### Ordering Information



\*0°C to 70°C only

### Pin Connections

PIN	FUNCTION
1	N/C or Tristate
2	Ground
3	Output
4	+Vdd

Electrical Specifications	PARAMETER	Symbol	Min.	Typ.	Max.	Units	Condition/Notes	
	Frequency Range	F	1		80	MHz		
	Operating Temperature	T <sub>A</sub>	(See Ordering Information)					
	Storage Temperature	T <sub>s</sub>	-55		+125	°C		
	Frequency Stability	$\Delta F/F$	(See Ordering Information)					
	Aging							
	1st Year		-5		+5	ppm		
	Thereafter (per year)		-5		+5	ppm		
	Input Voltage	V <sub>dd</sub>	3.0	3.3	3.6	V		
	Input Current	I <sub>dd</sub>			15	mA	1.000 to 27.000 MHz	
					20	mA	27.001 to 50.000 MHz	
					40	mA	50.001 to 80.000 MHz	
	Output Type						HCMOS/TTL	
	Load				15	pF	See Note 1	
	Symmetry (Duty Cycle)		(See Ordering Information)					50% V <sub>dd</sub> Level
	Logic "1" Level	V <sub>oh</sub>	90% V <sub>dd</sub>			V	HCMOS Load	
	Logic "0" Level	V <sub>ol</sub>			10% V <sub>dd</sub>	V	HCMOS Load	
Output Current				$\pm 4$	mA			
Rise/Fall Time	Tr/Tf			8	ns	See Note 2		
Tristate Function		Input Logic "1" or floating; output active Input Logic "0"; output disables to high-Z						
Start up Time				10	ms			
Random Jitter	Rj		5	12	ps RMS	1-Sigma		

1. See load circuit diagram #2
2. Rise/Fall times are measured between 10% V<sub>dd</sub> and 90% V<sub>dd</sub> with HCMOS load
3. TTL output drive capability is 2 TTL (10 LS-TTL)

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# MtronPTI Lead Free Solder Profile

