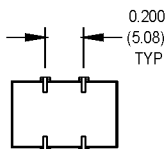
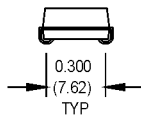
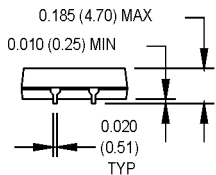
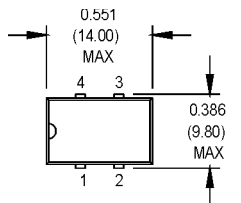
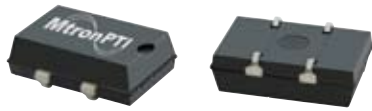


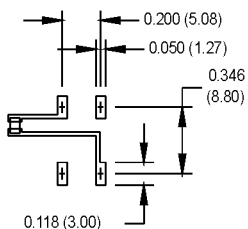
M3R Series

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 μ F or greater between Vdd and Ground is recommended.

Ordering Information

	M3R	1	3	F	A	J	-R	00.0000	MHz
Product Series									
Temperature Range									
1: 0°C to +70°C									
2: -40°C to +85°C									
6: -20°C to +70°C									
Stability									
3: ± 100 ppm									
4: ± 50 ppm									
6: ± 25 ppm*									
Output Type									
F: Fixed									
T: Tristate									
Symmetry/Logic Compatibility									
A: 40/60 TTL/HCMOS									
C: 45/55 HCMOS									
Package/Lead Configurations									
J: J Lead									
RoHS Compliance									
Blank: non-RoHS compliant part									
-R: RoHS compliant part									
Frequency (customer specified)									

*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 _A	(See Ordering Information)				
	Storage Temperature	T _S	-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 _{dd}	3.0	3.3	3.6	V	
	Input Current	I _{dd}			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 _{dd} Level
	Logic "1" Level	V _{oh}	90% V _{dd}			V	HCMOS Load
	Logic "0" Level	V _{ol}			10% V _{dd}	V	HCMOS Load
	Output Current				± 4	mA	
	Rise/Fall Time	T _r /T _f			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	R _j		5	12	ps RMS	1-Sigma

1. See load circuit diagram #2

2. Rise/Fall times are measured between 10% V_{dd} and 90% V_{dd} with HCMOS load

3. TTL output drive capability is 2 TTL (10 LS-TTL)

MtronPTI reserves the right to make changes to the product(s) and service(s) described herein without notice. No liability is assumed as a result of their use or application.

Please see www.mtronpti.com for our complete offering and detailed datasheets. Contact us for your application specific requirements: MtronPTI 1-800-762-8800.

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