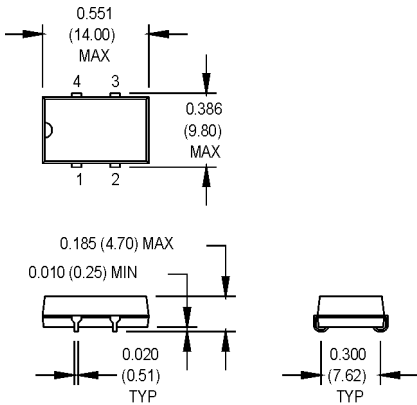
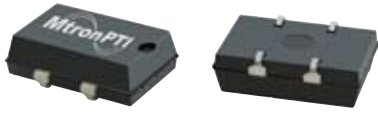


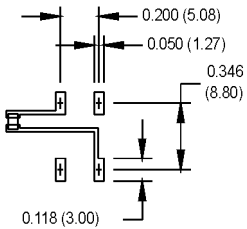
M3R Series

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

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	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	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.

MtronPTI Lead Free Solder Profile

