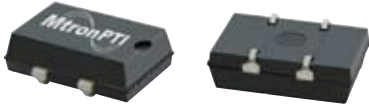


M3R Series

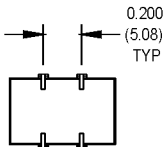
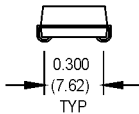
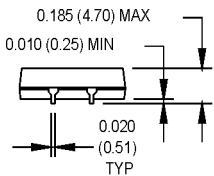
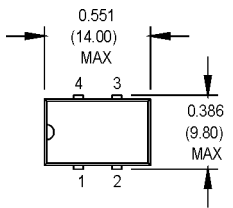
9x14 mm, 3.3 Volt, HCMOS/TTL, Clock Oscillator



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

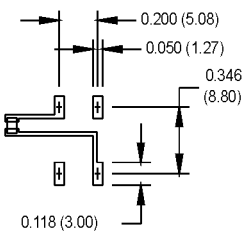


All dimensions in inches (mm).

Pin Connections

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

SUGGESTED SOLDER PAD LAYOUT



NOTE: A capacitor of value 0.01 μ F or greater between Vdd and Ground is recommended.

	PARAMETER	Symbol	Min.	Typ.	Max.	Units	Condition/Notes	
Electrical Specifications	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)

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