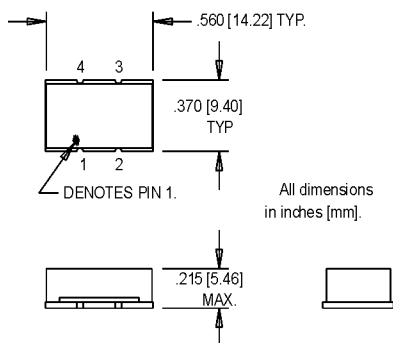


F1139BA Series

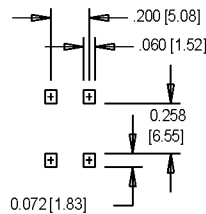
9x14 mm FR-4, 3.3 Volt, PECL, Clock Oscillator



- Former **Champion** TECHNOLOGIES, INC. Product
- Clock Recovery, Optic Transmission Equipment, Digital Cross Connect Equipment

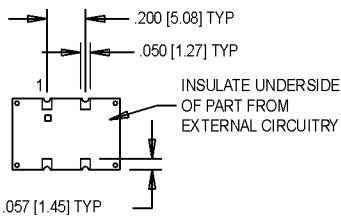


SUGGESTED SOLDER PAD LAYOUT



Ordering Information

	F1139BA	X	X	-R	00.0000 MHz
Package					
Stability					
Blank:	±20 ppm (0°C to +70°C only)				
B:	±50 ppm				
Temperature Range					
Blank:	0°C to +70°C				
M:	-40°C to +85°C				
RoHS Compliance					
Blank:	non-RoHS compliant part				
-R:	RoHS compliant part				
Frequency (customer specified)					



Pin Connections

PIN	FUNCTION
1	Output
2	Vss/Ground
3	Output
4	+Vcc

Electrical Specifications	PARAMETER	Symbol	Min.	Typ.	Max.	Units	Condition/Notes
	Frequency Range	F	70		200	MHz	
	Operating Temperature	T _A	(See Ordering Information)				
	Storage Temperature	T _S	-40		+85	°C	
	Frequency Stability	ΔF/F	(See Ordering Information)				
	Aging						
	1st Year			±2		ppm	
	Thereafter (per year)			±1		ppm	
	Input Voltage	V _{CC}	3.135	3.3	3.465	V	
	Input Current	I _{CC}			70	mA	
	Output Type						PECL
	Load		50 Ω to (V _{CC} - 2V) or Thevenin equivalent				
	Symmetry (Duty Cycle)		45		55	%	(V _{CC} - 1.3) ref. level
	Output Skew				100	ps	50%
	Logic "1" Level	V _{OH}	V _{CC} -1.02		V _{CC} -0.72	V	50Ω into (V _{CC} -2) load
	Logic "0" Level	V _{OL}	V _{CC} -1.95		V _{CC} -1.60	V	50Ω into (V _{CC} -2) load
	Rise Time	T _r			450	ps	20% to 80%
	Fall Time	T _f			450	ps	80% to 20%
	Start up Time				10	ms	
	Random Jitter	R _j		5	12	ps RMS	1-Sigma

1. Inclusive of calibration, temperature, voltage, load and 10 years aging.

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.