

# F2139BA 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

### Ordering Information

**00.0000**

**F2139BA X X X -R MHz**

Package \_\_\_\_\_

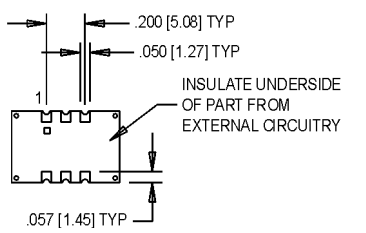
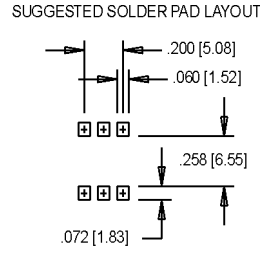
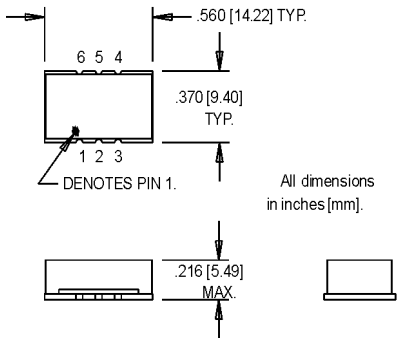
Stability \_\_\_\_\_  
 Blank: ±20 ppm (0°C to +70°C only)  
 B: ±50 ppm

Temperature Range \_\_\_\_\_  
 Blank: 0°C to +70°C  
 M: -40°C to +85°C

Enable/Disable Function \_\_\_\_\_  
 Blank: N/C on Pin 1  
 E: Enable/Disable on Pin 1

RoHS Compliance \_\_\_\_\_  
 Blank: non-RoHS compliant part  
 -R: RoHS compliant part

Frequency (customer specified) \_\_\_\_\_



### Pin Connections

PIN	FUNCTION
1	N/C or E/D
2	N/C
3	Vss/Ground
4	Output Q
5	Output Q̄
6	+Vcc

PARAMETER	Symbol	Min.	Typ.	Max.	Units	Condition/Notes	
Frequency Range	F	70		200	MHz		
Operating Temperature	T <sub>A</sub>	(See Ordering Information)					
Storage Temperature	T <sub>s</sub>	-40		+85	°C		
Frequency Stability	ΔF/F	(See Ordering Information)					See Note 1
Aging							
1st Year			±2		ppm		
Thereafter (per year)			±1		ppm		
Input Voltage	V <sub>cc</sub>	3.135	3.3	3.465	V		
Input Current	I <sub>cc</sub>			70	mA		
Output Type						PECL	
Load		50 Ω to (V <sub>cc</sub> - 2V) or Thevenin equivalent					
Symmetry (Duty Cycle)		45		55	%	(V <sub>cc</sub> - 1.3) ref. level	
Output Skew				100	ps	50%	
Logic "1" Level	V <sub>oh</sub>	V <sub>cc</sub> -1.02		V <sub>cc</sub> -0.72	V	50Ω into (V <sub>cc</sub> -2) load	
Logic "0" Level	V <sub>ol</sub>	V <sub>cc</sub> -1.95		V <sub>cc</sub> -1.60	V	50Ω into (V <sub>cc</sub> -2) load	
Rise Time	T <sub>r</sub>			450	ps	20% to 80%	
Fall Time	T <sub>f</sub>			450	ps	80% to 20%	
Enable Function		PECL low: output active PECL high: output disables					
Start up Time				10	ms		
Random Jitter	R <sub>j</sub>		5	12	ps RMS	1-Sigma	

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

# MtronPTI Lead Free Solder Profile

