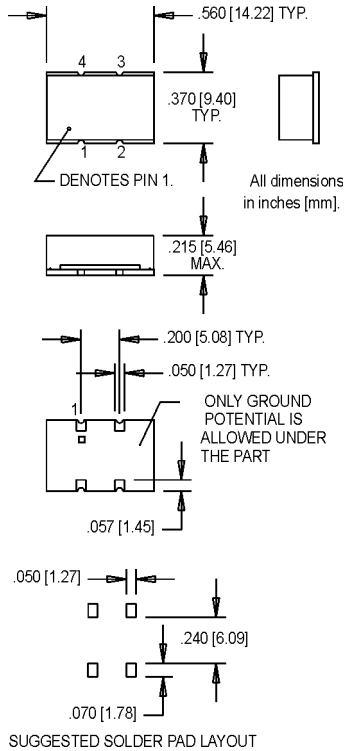
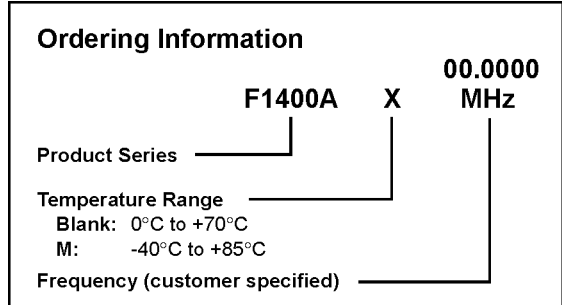


# F1400A Series 9x14 mm FR-4, 5.0 Volt, Sinewave, Clock Oscillator



• Former **Champion** TECHNOLOGIES, INC. Product



## Pin Connections

PIN	FUNCTION
1	N/C
2	Ground & Case Ground
3	Output
4	+Vdd

	PARAMETER	Symbol	Min.	Typ.	Max.	Units	Condition	
Electrical Specifications	Frequency Range	F	70		210	MHz		
	Frequency Stability	$\Delta F/F$						
	Overall		Inclusive of calibration, temperature Voltage, load, and aging					
	-10°C to +70°C				±25	ppm		
	-40°C to +85°C				±35			
	Operating Temperature	T <sub>A</sub>	-40		+85	°C		
	Storage Temperature	T <sub>s</sub>	-40		+85	°C		
	Input Voltage	V <sub>dd</sub>	4.75	5.0	5.25	V		
	Input Current	I <sub>dd</sub>			40	mA		
	Output Signal		Sinewave					
	Load				50	Ω		
	Output Power		0	3	6	dBm		
	Harmonics				-20	dBc		
	Sub-Harmonics & Spurious Modes				-70	dBc		
	Start up Time				10	ms		
Environmental	Phase Noise (Typical) @ 155.520 Mhz	10 Hz -65	100 Hz -95	1 kHz -125	10 kHz -145	100 kHz -150	dBc/Hz	
	Temperature Cycle	MIL-STD-883, Method 1010, Condition B					-55°C to +125°C; Air-to-Air; 100 cycles; 10 min. dwell	
	Mechanical Shock	MIL-STD-883, Method 2002, Condition B					1500 g's	
	Vibration	MIL-STD-883, Method 2007, Condition B					20-2000 Hz; 0.06 inch; 15 g's; 3 planes	
	Humidity Steady State	MIL-STD-202, Method 103					40°C; 90%-95% R.H.; 56 days	
	Thermal Shock	MIL-STD-883, Method 1011.7, Cond. B					100°C to 0°C; Water-to-Water; 15 cycles	
	Electrostatic Discharge	MIL-STD-883, Method 3015, Class II					2 kV to 4 kV Threshold	
	Solderability	MIL-STD-883, Method 2022.2					Solder dip; Meniscograph Criteria	
	Hermeticity	MIL-STD-883, Method 1014.8, Cond. A1					Mass spectro. 2 x 10 <sup>-8</sup> atoms. CC/sec He	
	Resistance to Soldering	See "Figure 2" on page 147						
	Lead Integrity	MIL-STD-883, Mtd. 2004.5, Cond. A,B1					Lead tension & bend stress	
	Marking Permanence	MIL-STD-883, Method 2015.8					Resistance to solvents	
	Life Test	MIL-STD-883, Method 1005.6					125°C, powered, 1000 hours minimum	

M-tron 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. No rights under any patent accompany the sale of such product.

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