

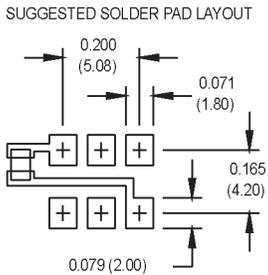
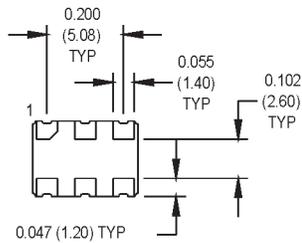
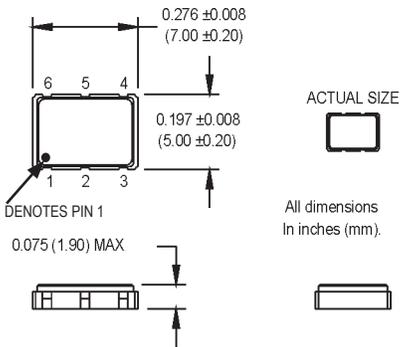
# UVC Series

## 5x7 mm, 3.3 Volt, LVPECL/LVDS, Clock Oscillators



Ordering Information							00.0000 MHz
Product Series	UVC	1	8	R	L	N	
Temperature Range		1: 0°C to +70°C	2: -40°C to +85°C				
		6: -20°C to +70°C	7: -0°C to +85°C				
		8: 0°C to +50°C					
Stability		3: ±100 ppm	4: ±50 ppm				
		6: ±25 ppm	8: ±20 ppm				
Output Type		R: Complementary Enable	Z: Complementary w/o Enable				
Symmetry/Output Logic Type		L: 45/55% LVDS	P: 45/55% PECL				
		H: 40/60% LVDS	Q: 40/60% PECL				
Package/Lead Configurations		N: Leadless Ceramic (6 pads)					
Frequency (customer specified)							

M2022Sxxx - Contact factory for datasheet.



### Pad Connections

Pad	Function
1	Enable/Disable for "R" Output Type or N/C for "Z" Output Type
2	N/C
3	Ground
4	Output Q
5	Complementary Output $\bar{Q}$
6	+ Vdd

PARAMETER	Symbol	Min.	Typ.	Max.	Units	Condition/Notes
Frequency Range	F	0.75		800	MHz	
Operating Temperature	T <sub>A</sub>	(See ordering information)				
Storage Temperature	T <sub>S</sub>	-55		+125	°C	
Frequency Stability	ΔF/F	(See ordering information)				
Aging		See Note 1				
1st Year Thereafter (per year)		-3		+3	ppm	
		-1		+1	ppm	
Input Voltage	V <sub>CC</sub>	3.135	3.3	3.465	V	
PECL Input Current	I <sub>CC</sub>			70	mA	0.75 to 24 MHz
				100	mA	24 to 96 MHz
				110	mA	96 to 800 MHz
LVDS Input Current	I <sub>CC</sub>			30	mA	0.75 to 24 MHz
				60	mA	24 to 96 MHz
				60	mA	96 to 800 MHz
Output Type						PECL/LVDS
Load		50 Ohms to V <sub>CC</sub> - 2 VCD 100 Ohm differential load				See Note 2 PECL Waveform LVDS Waveform
Symmetry (Duty Cycle)		(See ordering information)				
		@ 50% of waveform				
Output Skew				200	ps	PECL
Differential Voltage	V <sub>OD</sub>	250	350	450	mV	LVDS
Logic "1" Level	V <sub>OH</sub>	V <sub>CC</sub> - 1.02			V	PECL
Logic "0" Level	V <sub>OL</sub>			V <sub>CC</sub> - 1.63	V	PECL
Rise/Fall Time	T <sub>r</sub> /T <sub>f</sub>		0.35	0.55	ns	@ 20/80% LVPECL
			0.50	1.0	ns	@ 20/80% LVDS
Enable Function		80% V <sub>CC</sub> min or N/C: output active 20% V <sub>CC</sub> max: output disables to high-Z				Output Option R
Start up Time				10	ms	
Phase Jitter (Typical)	φ <sub>J</sub>		3	5	ps RMS	Integrated 12 kHz - 20 MHz
Mechanical Shock		MIL-STD-202, Method 213, C (100 g's)				
Vibration		MIL-STD-202, Method 201 & 204 (10 g's from 10-2000 Hz)				
Thermal Cycle		MIL-STD-883, Method 1010, B (-55°C to +125°C, 15 min dwell, 10 cycles)				
Hermeticity		MIL-STD-202, Method 112				
Solderability		Per EIAJ-STD-002				
Max Soldering Conditions		See solder profile, Figure 1				

- Inclusive of initial tolerance, deviation over temperature, shock, vibration, voltage and aging.
- PECL load - see Load Circuit Diagram #5. LVDS load - see load circuit diagram #9.

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](http://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

