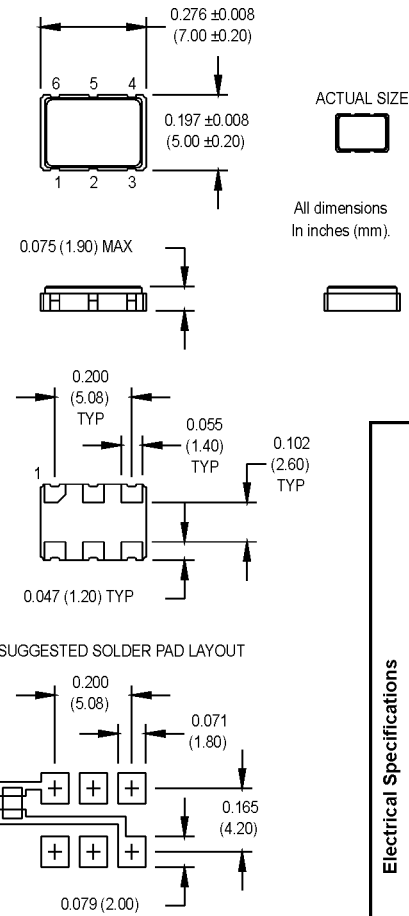
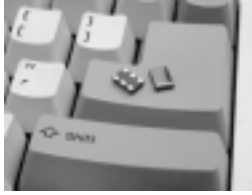


UVC Series

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



Ordering Information

Product Series	UVC	1	8	R	L	N	00.0000 MHz
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 Tri-state	Z: Complementary Non-Tri-state					
Symmetry/Output Logic Type	L: 45/55% LVDS	P: 45/55% LVPECL	H: 40/60% LVDS	Q: 40/60% LVPECL			
Package/Lead Configurations	N: Leadless Ceramic (6 pads)						
Frequency (customer specified)							

PARAMETER	Symbol	Min.	Typ.	Max.	Units	Condition
Frequency Range	F	0.75		800	MHz	
Frequency Stability	$\Delta F/F$	(See Ordering Information)				See Note 1
Operating Temperature	Ts	-40		+85	°C	See ordering information
Storage Temperature	TA	-55		+125	°C	
Input Voltage	Vcc	3.135	3.3	3.465	V	
PECL Input Current	Icc			70	mA	See Note 2
0.75 MHz to 24 MHz				100	mA	
24 MHz to 96 MHz				110	mA	
96 MHz to 800 MHz						
LVDS Input Current	Icc			30	mA	See Note 3
0.75 MHz to 24 MHz				60	mA	
24 MHz to 96 MHz				60	mA	
96 MHz to 800 MHz						
Symmetry (Duty Cycle)		40	50	60	%	At 50% of waveform
Load		50 Ohms to Vcc -2 VDC 50 Ohm differential load				PECL waveform LVDS waveform
Rise/Fall Time	Tr/Tf		0.35	0.55	ns	At 20/80%
Logic "1" Level	Voh	Vcc -1.02			V	LVPECL
Logic "0" Level	Vol			Vcc -1.63	V	LVPECL
Cycle to Cycle Jitter			10	20	ps RMS	1 Sigma
Phase Jitter	ϕJ		3	5	ps RMS	Integrated 12 kHz - 20 MHz
Peak to Peak Jitter (+/-)	Tj		21	35	ps	@ BER 1E-12
Differential Voltage	Vo	250	340	450	mV	LVDS
Tri-state Output "On"	OE	2.8			V	Pin 1 voltage
Tri-state Output "Off"	OE			0.6	V	Pin 1 voltage
Mechanical Shock	Per MIL-STD-202, Method 213, Condition C					
Vibration	Per MIL-STD-202, Method 201 & 204					
Reflow Solder Conditions	See "Figure 2" on page 147					
Hermeticity	Per MIL-STD-202, Method 112 (1 x 10 ⁻⁸ atm.cc/s of helium)					
Solderability	Per EIAJ-STD-002					

Pin Connections

PIN	FUNCTION
1	Tri-state
2	N/C
3	Ground
4	Output1/ Q
5	Output2/ \bar{Q}
6	+Vdd

- Inclusive of initial tolerance, deviation over temperature, shock, vibration, voltage, and aging.
- See load circuit diagram #5 on page 149.
- See load circuit diagram #9 on page 149.

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