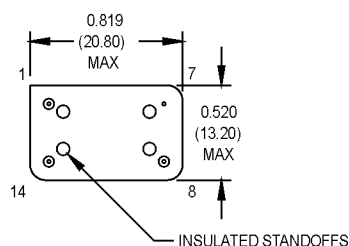
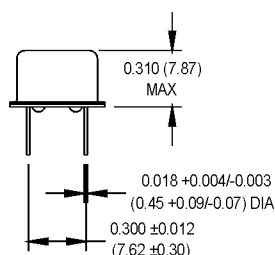
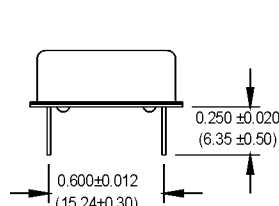


MTXV Series 5.0 Volt TCVCXO



All dimensions
in inches (mm).

* See page 90 for surf board configuration.

Pin Connections

PIN	FUNCTION
1	Control Voltage
7	Ground/Case
8	Output
14	+Vdd

Ordering Information

Product Series	MTXV	1	H	8	A	D	00.0000 MHz
Temperature Range	1: 0°C to +70°C	2: -40°C to +85°C	6: -20°C to +70°C	8: 0°C to +50°C			
Stability*	E: ±10 ppm	L: ±5 ppm	H: ±2.5 ppm				
Frequency Control (Pin #1)	8: ±25 ppm Min.	9: ±35 ppm Min.					
Symmetry/Logic Compatibility	A: 40/60 CMOS/TTL	B: 45/55 TTL (< 100.000 MHz only)	C: 45/55 CMOS				
Package/Lead Configurations	D: DIP; Nickel Header	S: Surf Board					
Frequency (customer specified)							

* Referenced to 25°C reading at 2.5 VDC control voltage.

	PARAMETER	Symbol	Min.	Typ.	Max.	Units	Condition
Electrical Specifications	Frequency Range	F	0.5		155.52	MHz	
	Frequency Stability	ΔF/F	(See Ordering Information)				
	Operating Temperature	TA	(See Ordering Information)				
	Storage Temperature	Ts	-55		+125	°C	
	Input Voltage	Vdd	4.75	5.0	5.25	VDC	
	Input Current	Idd		15	25	mA	0.5 MHz to 30 MHz
				18	30	mA	30.001 MHz to 70 MHz
				20	45	mA	70.001 MHz to 155.52 MHz
	Symmetry ¹		(See Ordering Information)				
	Load		5 TTL or 15 pF Max.				
	Rise/Fall Time ²	Tr/Tf			10	ns	0.5 MHz to 30 MHz
					5	ns	30.001MHz to 155.52 MHz
	Logic "1" Level	Voh	2.4			VDC	TTL
	Logic "0" Level	Vol			10	VDC	TTL
					0.4	%	HCMOS
	Cycle to Cycle Jitter				4.2	ps RMS	1 Sigma
					8.7	ps RMS	
					5.5	ps RMS	
	Phase Noise (Typical)	10 Hz		100 Hz	1 kHz	10 kHz	Offset from carrier
			-78	-103	-136	-143	dBc/Hz
			-45	-77	-100	-89	dBc/Hz
			-42	-66	-76	-80	dBc/Hz
	Modulation Bandwidth	fm	10			kHz	
	Input Impedance (Pin 1)	Zin	50			KΩ	
	Control Voltage	Vc	0	2.5	5.0	VDC	
	Center Frequency	Vc0		2.5		VDC	
	Pullability		(See Ordering Information)				
	Deviation Slope						Positive, Monotonic
Environmental	Mechanical Shock	Per MIL-STD-202, Method 213, Condition C					
	Vibration	Per MIL-STD-202, Method 201 & 204					
	Reflow Solder Conditions	240°C for 10 s max.					
	Hermeticity	Per MIL-STD-202, Method 112 (1 x 10 ⁻⁸ atm.cc/s of helium)					
	Solderability	Per EIAJ-STD-002					

1. Symmetry is measured at 1.4 V with TTL load, and at 50% Vdd with HCMOS load.

2. Rise/fall times are measured between 0.5 V and 2.4 V with TTL load, and between 10% Vdd and 90% Vdd with HCMOS load.

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M-tron Industries, Inc., PO Box 630, Yankton, SD 57078-0630, USA Phone: 605-665-9321 or 1-800-762-8800 Fax: 605-665-1709 Website: www.mtron.com
M-tron Industries Limited, 1104 Shanghai Industrial Investment Building, 48-62 Hennessy Road, Wanchai, Hong Kong, China Phone: 852-2866-8023 Fax: 852-2529-1822