K1603TE Series
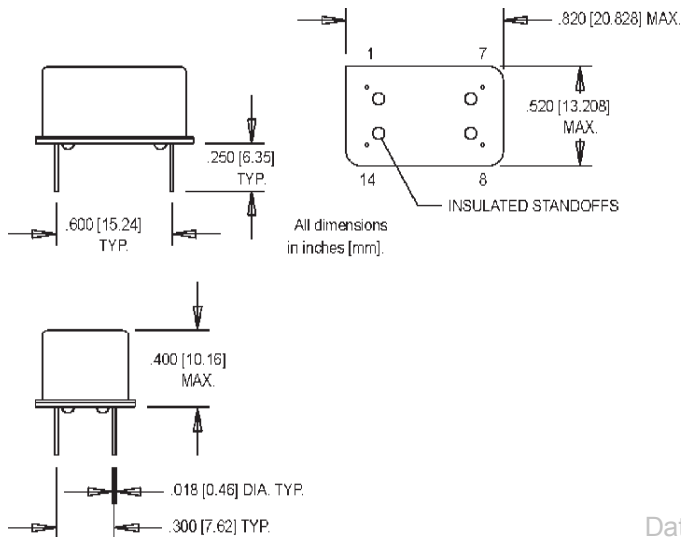## 14 DIP, 5.0 Volt, CMOS/TTL, TCXO

MtronPTI

- Former **Champion** Product

- Clocking "Sync" to NTSC Video Standards, Reference Signal, Signal Tracking

- Stratum 3 Compliant

Ordering Information

Product Series ———— **K1603TE**

Frequency (customer specified) ———— **00.0000 MHz**

All dimensions in inches [mm].

INSULATED STANDOFFS

.820 [20.828] MAX.
.520 [13.208] MAX.
.250 [6.35] TYP.
.600 [15.24] TYP.
.400 [10.16] MAX.
.018 [0.46] DIA. TYP.
.300 [7.62] TYP.

Pin Connections

PIN	FUNCTION
1	Tristate
7	Ground/Case Gnd
8	Output
14	+Vdd

	PARAMETER	Symbol	Min.	Typ.	Max.	Units	Condition/Notes
Electrical Specifications	Frequency Range	F	2		30	MHz	
	Operating Temperature	TA	-40		+85	°C	
	Storage Temperature	Ts	-40		+85	°C	
	Frequency Stability	∆F/F			±4.6	ppm	
	Aging (10 Year)		-2		+2	ppm	
	Input Voltage	Vdd	4.75	5.0	5.25	V	
	Input Current	Idd			20	mA	
	Output Type						HCMOS/TTL
	Load		5 TTL or 15 pF HCMOS				See Note 1
	Symmetry (Duty Cycle)						See Note 2
	<14 MHz		45		55	%	
	≥14 MHz		40		60	%	
	Logic "1" Level	Voh	4.5			V	
	Logic "0" Level	Vol			0.5	V	
	Rise Time	Tr		3.5	9.0	ns	
	Fall Time	Tf		2.0	8.0	ns	
	Tristate Function		Input Logic "1" or N/C: output active				
			Input Logic "0": output disables to high-Z				
	Start up Time				10	ms	
	Phase Noise (Typical)		10 Hz	100 Hz	1 kHz	10 kHz	100 kHz	Offset from carrier
	@ 20 MHz		-80	-108	-125	-132	-155	dBc/Hz

1. TTL load - see load circuit diagram #1 on page 115. HCMOS load - see load circuit diagram #2 on page 115.
2. Symmetry is measured at 1.4 V with TTL load, and at 50% Vdd with HCMOS load.

Please see **www.mtronpti.com** for our complete offering and detailed datasheets. Contact us for your application specific requirements: MtronPTI **1-800-762-8800.**