

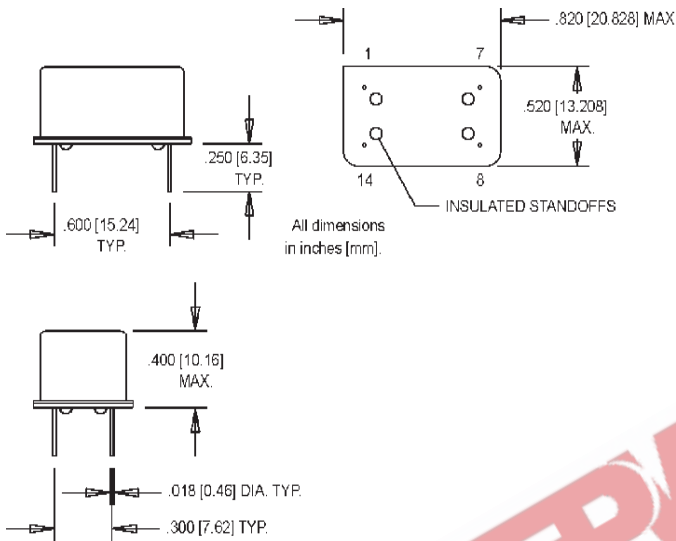
# K1603TE Series

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



- Former **Champion** TECHNOLOGIES, INC. 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



### Pin Connections

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

PARAMETER	Symbol	Min.	Typ.	Max.	Units	Condition/Notes
Frequency Range	F	2		30	MHz	
Operating Temperature	T <sub>A</sub>	-40		+85	°C	
Storage Temperature	T <sub>S</sub>	-40		+85	°C	
Frequency Stability	ΔF/F			±4.6	ppm	
Aging (10 Year)		-2		+2	ppm	
Input Voltage	V <sub>dd</sub>	4.75	5.0	5.25	V	
Input Current	I <sub>dd</sub>			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	V <sub>oh</sub>	4.5			V	
Logic "0" Level	V <sub>ol</sub>			0.5	V	
Rise Time	T <sub>r</sub>		3.5	9.0	ns	
Fall Time	T <sub>f</sub>		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)						
@ 20 MHz	-80	100 Hz	1 kHz	10 kHz	100 kHz	Offset from carrier dBc/Hz
		-108	-125	-132	-155	

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% V<sub>dd</sub> with HCMOS load.

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