

# K1603TE Series

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

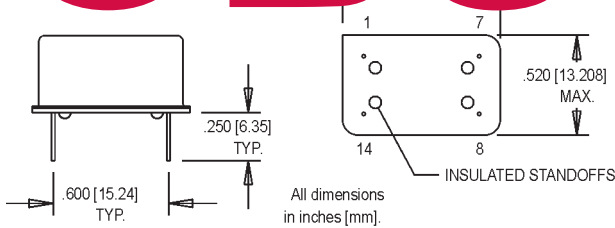


### Ordering Information

Product Series	K1603TE	RoHS Compliance	-R	Frequency (customer specified)	00.0000 MHz
Blank: non-RoHS compliant part					
-R: RoHS compliant part					

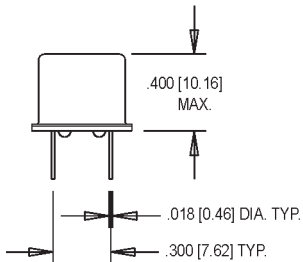
- Former **Champion** TECHNOLOGIES, INC. Product
- Clocking "Sync" to NTSC Video Standards, Reference Signal Tracking, Structure Compliant

# OBSOLETE



### 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 max.				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		10 Hz -80	100 Hz -108	1 kHz -125	10 kHz -132	100 kHz -155	Offset from carrier dBc/Hz
Mechanical Shock		Per MIL-STD-202, Method 213, Condition C (100 g's, 6 ms duration, ½ sinewave)					
Vibration		Per MIL-STD-202, Method 201 & 204 (10 g's from 10-2000 Hz)					
Hermeticity		Per MIL-STD-202, Method 112, (1x10 <sup>-8</sup> atm. cc/s of Helium)					
Thermal Cycle		Per MIL-STD-883, Method 1010, Condition B (-55°C to +125°C, 15 min. dwell, 10 cycles)					
Solderability		Per EIAJ-STD-002					
Max Wave Soldering Conditions		See solder profile, Figure 2					

1. TTL Load – see load circuit diagram #1. HCMOS load – see load circuit diagram #2.
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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