

RADITEK INC.

TEMPERATURE COMPENSATED CRYSTAL OSCILLATORS

code-w

RTCXO-TC18A SERIES



- Stability up to $\pm 0.5 \times 10^{-6}$
- SDH/SONET
- Control Voltage Range $\pm 10 \times 10^{-6}$ Max
- ATM
- TTL/HCMOS Output
- WLL
- Good Phase Noise
- Measurement Equipment

Performance Characteristics

Parameter		Condition	TC18A	
Frequency Range	F_0		1.200MHz~50.000MHz	
Frequency Stability		All Condition	See Next Table	
Operating Temperature Range	T_{OPR}		See Next Table	
Supply Voltage	V_{DD}		B: +5.0VDC \pm 10%	A: +3.3VDC \pm 10%
Supply Current	I_{DD}	$1.2M \leq F_0 < 15M$	20mA Max	15mA Max
		$15M \leq F_0 < 36M$	30mA Max	25mA Max
		$36M \leq F_0 < 50M$	40mA Max	32mA Max
Output Load			A: TTL 15pF C: CMOS 15pF D: CMOS 50pF	
Output Duty		1.4V or 1/2 V_{DD}	45%~55%	
Control Voltage Range			See Ordering Information	
Frequency Stability V_s	Supply Voltage change	$\pm 5\%$	$\pm 0.2 \times 10^{-6}$	
	Load change	$\pm 10\%$	$\pm 0.2 \times 10^{-6}$	
	Aging		$\pm 1 \times 10^{-6}$ /year	
Rise Time	T_r	0.4V~2.4V	10nS Max	
		10% V_{DD} ~90% V_{DD}		
Fall Time	T_f	2.4V~0.4V	10nS Max	
		90% V_{DD} ~10% V_{DD}		
Output Level	"0"Level	V_{OL}	0.4V Max or 10% V_{DD}	
	"1"Level	V_{OH}	2.4V Min or 90% V_{DD}	
Vc Input Impedance			100K Ω	
Start-Up Time	T_s		2mS Max	
Storage Temperature Range	T_{STG}		-55 $^{\circ}$ C~+125 $^{\circ}$ C	

Frequency Stability Over Temperature Range

Temperature Range	Frequency Stability					
	H: $\pm 0.5 \times 10^{-6}$	I: $\pm 1.0 \times 10^{-6}$	J: $\pm 1.5 \times 10^{-6}$	K: $\pm 2.0 \times 10^{-6}$	L: $\pm 2.5 \times 10^{-6}$	N: $\pm 5.0 \times 10^{-6}$
A: 0 $^{\circ}$ C~+50 $^{\circ}$ C	●	●	●	●	●	●
B: -10 $^{\circ}$ C~+60 $^{\circ}$ C	●	●	●	●	●	●
C: -20 $^{\circ}$ C~+70 $^{\circ}$ C		●	●	●	●	●
D: -30 $^{\circ}$ C~+75 $^{\circ}$ C		●	●	●	●	●
G: -40 $^{\circ}$ C~+85 $^{\circ}$ C		●	●	●	●	●

RTCXO-TC18A Series-w

Specifications may be subject to change

10/11/06

WORLD HQ: 1702H Meridian Ave. Suite 127, San Jose, Ca 95125, U.S.A.

Telephone: (408) 266-7404 FAX: (408) 266-4483

WEB: www.raditek.com, E-mail: sales@raditek.com

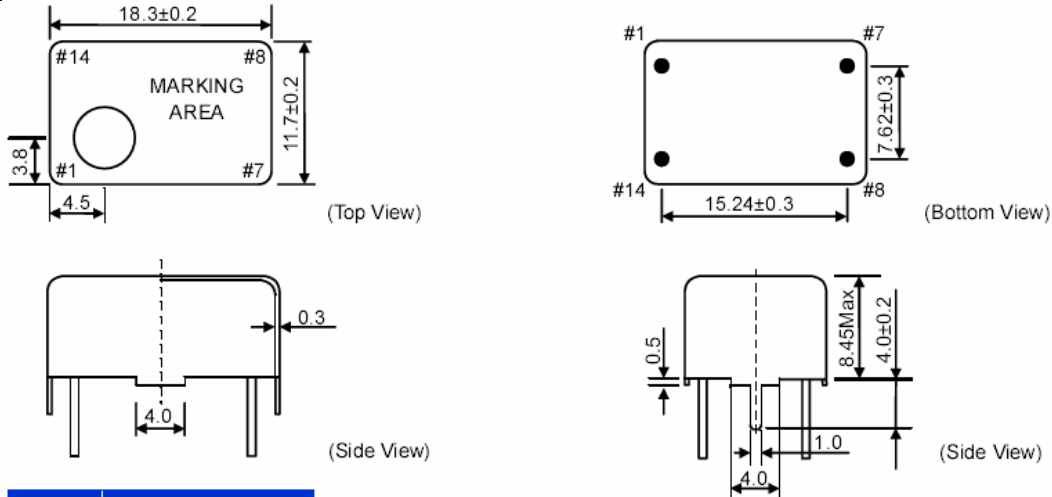
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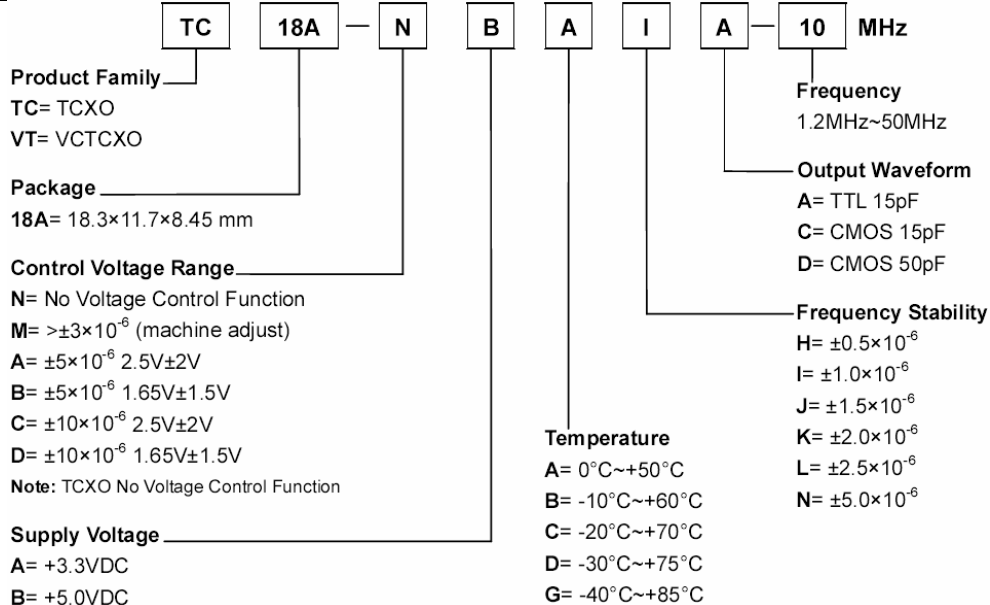
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OUTLINE DRAWING (units in mm – not to scale)



PIN	FUNCTION
#1	VC/NC
#7	GND
#8	OUTPUT
#14	+DC

ORDERING INFORMATION



ORDERING EXAMPLE

TC18A-NBAIA-10MHz
 TCXO / No Voltage Control Function / +5.0VDC / 0°C~+50°C / ±1.0×10⁻⁶ / TTL 15pF / 10MHz
 VT18A-ABAIA-10MHz
 VCTCXO / ±5PPM 2.5V±2V / +5.0VDC / 0°C~+50°C / ±1.0×10⁻⁶ / TTL 15pF / 10MHz

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