



Temperature Compensated Crystal Oscillator - TCXO - TC18

Pin Type - 18.30 x 11.90 x 4.7mm

● Features

- High performance
- Good phase noise
- RoHS compliant

● General Specification

Type	TC18			
Frequency Range	1.00MHz to 40.00MHz			
Frequency Stability	at 25°C	±1.0ppm max		
	vs. Temperature range	± 0.5ppm (0 to +50°C)		
		± 1.0ppm (-10 to +60°C)		
		± 1.5ppm (-20 to +70°C)		
		± 2.0ppm (-40 to +85°C)		
	Aging per year	± 1.0ppm max		
	vs Load Change of ±10%	± 0.2ppm		
vs Supply Voltage Change of ±5%	± 0.2ppm			
Temperature Range	Operating	0 to +50°C or custom-designed		
	Storage	-40 to + 100°C		
Input	Supply Voltage	3.3V + 10% or 5.0V + 10%		
	Current Consumption		10.0mA or 20.0mA	
Output	Waveform	Clipping Sine	TTL/HCMOS	Sine
	Rise & Fall Time	-	6ns	Harmonic suppression:>25dB
	Load	10kΩ / 10pF	10TTL/15pF	50kΩ
	Symmetry	-	40/60%	Noise suppression:>75dB
	Level	>1Vp-p	VoH: 2.4V / VoL: 0.4V VoH: 0.9V / VoL: 0.1V	>2dB
External Control Function	External Tuning Range	± 10ppm min		
	External Tuning Voltage	2.5V ± 2.0V		
Phase Noise	at 10Hz	-70dBc/Hz		
	at 100Hz	-100 dBc/Hz		
	at 1KHz	-130 dBc/Hz		
	at 10KHz	-140dBz/Hz		
	at 100KHz	-145dBc/Hz		

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Website: www.newxtal.com

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● Frequency Stability Codes (ppm)

A = ± 1.0	B = ± 1.5	C = ± 2.0	D = ± 2.5	E = ± 3.0	F = ± 4.0
G = ± 5.0	H = ± 0.5				

● Operating Temperature Range Codes(°C)

A = 0 to +50	B = 0 to +70	C = -20 to +70	D = -30 to +75	E = -40 to +85	F = +10 to +70
G = -40 to +60	H = -30 to +80	I = -10 to +40	J = -40 to +70	K = -10 to +60	L = -30 to +70

● Marking

Holder Type

Frequency + M(MHz) + Date code (Year Code + Month Code)

NEWXTAL (Company brand)

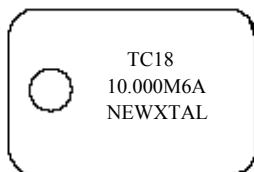
Year Code:

2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
1	2	3	4	5	6	7	8	9	10	11	12

Month Code:

Jan	Feb	March	Apr	May	June	July	August	Sept	October	Nov	Dec
A	B	C	D	E	F	G	H	I	J	K	L

For Example:



● Ordering Information

Holder	Type	SMD Size	Stability	Temperature	Input Voltage	Output Waveform	Frequency	Lead-free	Packing
			(ppm)	(°C)	(V)				
TC= TCXO VT= VC(TCXO)	18=TC18	Blank= N/A	See tables		1=3.3 2=5.0 3=3.0 4=2.8	0 = Clipping Sine 1 = TTL/HCMOS 2 = Sine	xx.xxM	LF=leadfree	Blank: bulk
			± 1.0	0 to +70					
TC	18		A	B	2	0		LF	

For Example: TC18AB20-10.000MLF

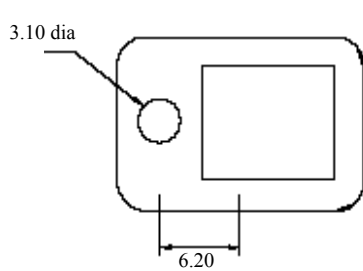
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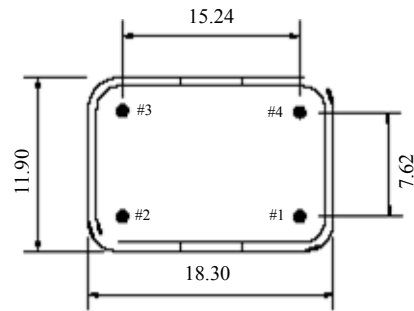
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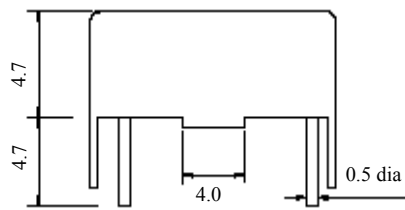
• Dimensions



Top View



Bottom View



Side View

Pin Connection
#1 NC or Vcontrol
#7 Ground
#8 Output
#14 Supply Voltage

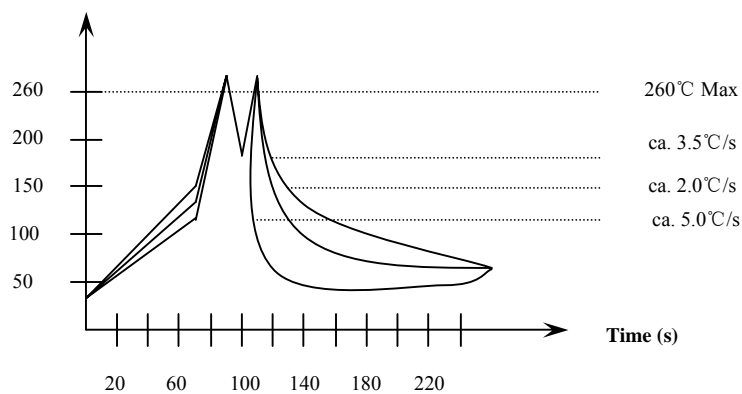
in mm

• Packing

Bulk.

• Wave Soldering Profile

Bath temperature (°C)



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