



# Oscillator - (VC)TCXO - SMD 5032

**SMD Type (VC)TCXO - 5.0 x 3.2 x 1.2mm**

## ● Features

- High performance
- Low power
- RoHS compliant

## ● General Specification

Type	SMD 5.0 x 3.2	
Frequency Range	10.00MHz to 30.00MHz	
Frequency Stability	at 25 °C	$\pm 0.5$ ppm max
	vs Temperature	$\pm 1.0$ ppm (0 to +50 °C)
		$\pm 1.5$ ppm (-10 to +60 °C)
		$\pm 2.0$ ppm (-20 to +70 °C)
		$\pm 2.5$ ppm (-30 to +75 °C)
		$\pm 5.0$ ppm (-40 to +85 °C)
	Aging first year	$\pm 1.0$ ppm max
	vs Load Change of $\pm 10\%$	$\pm 0.2$ ppm
vs Supply Voltage Change of $\pm 5\%$	$\pm 0.2$ ppm	
Temperature	Operating	0 to +50 °C
	Storage	-40 to + 85 °C
Input	Supply Voltage	2.8V to 5.0V
	Current Consumption	2.5mA max
Output	Waveform	Clipping Sine
	Load	10k $\Omega$ / 10pF
	Level	>0.8Vp-p
External Control Function	External Tuning Range	$\pm 8.0$ ppm min
	External Tuning Voltage	1.5V $\pm$ 1.0V
Start-up Time max	2.5ms	
Phase Noise	at 100Hz	-115 dBc/Hz
	at 1KHz	-135 dBc/Hz
	at 10KHz	-148dBz/Hz

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## ● Frequency Stability Codes (ppm)

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

## ● Operating Temperature 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

**Frequency + TC(Holder: TCXO) + Date code ( Year Code + Month Code )**

**NEWXTAL (Company brand)**

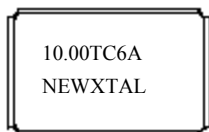
Year Code:

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	September	October	Nov	December
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)	S=SMD	2=5.0x3.2	See tables		1=3.3 2=5.0 3=3.0 4=2.8	0 = Clipping Sine	xx.xxM	LF=leadfree	TR=tape & reel
			$\pm 1.0$	0 to +50					
<b>TC</b>	<b>S</b>	<b>2</b>	<b>A</b>	<b>A</b>	<b>2</b>	<b>0</b>		<b>LF</b>	<b>TR</b>

**For Example: TCS2AA20-10.000MLF/TR**

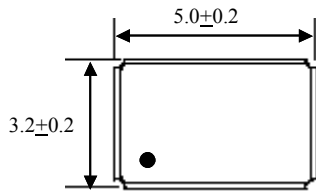
NEWXTAL

Website: [www.newxtal.com](http://www.newxtal.com)

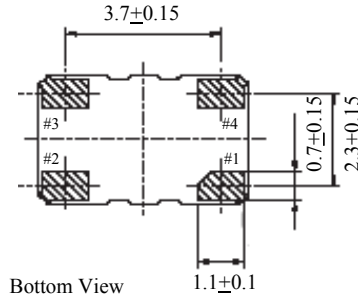
Email: [hkcrystal@incnets.com](mailto:hkcrystal@incnets.com)

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## Dimensions



Top View

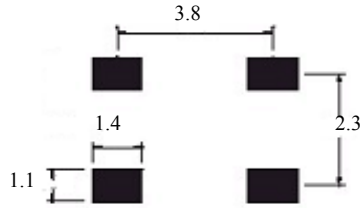


Bottom View

TCXO  
Pin Connection  
#1 NC  
#2 Ground  
#3 Output  
#4 Vcc



Side View

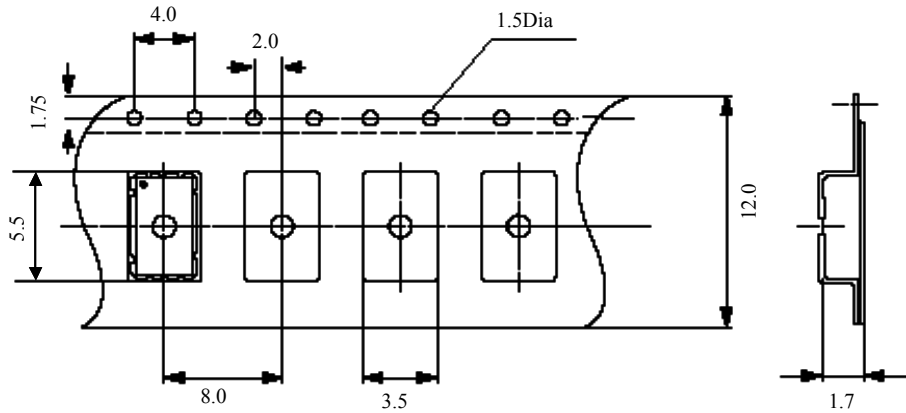


Pad layout

VCTCXO  
Pin Connection  
#1 Vcontrol  
#2 Ground  
#3 Output  
#4 Vcc

in mm

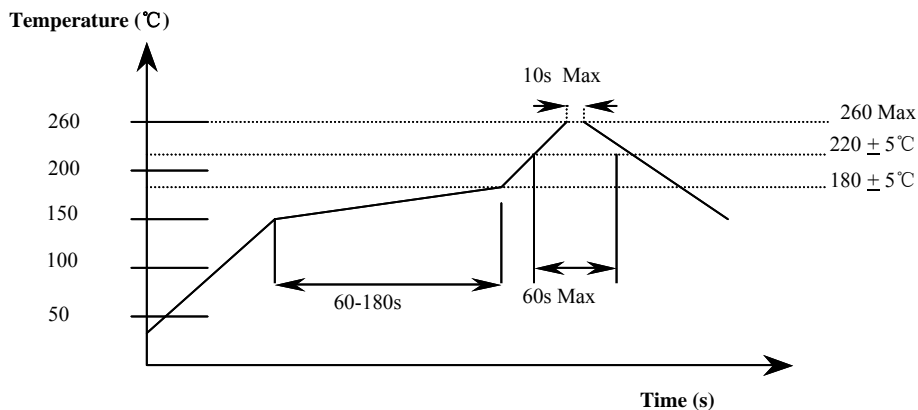
## Taping Specification



\* Quantity: 1K/reel

in mm

## Reflow Soldering Profile



NEWXTAL

Website: [www.newxtal.com](http://www.newxtal.com)

Email: [hkcrystal@incnets.com](mailto:hkcrystal@incnets.com)