

#### 4 Pad Version - 6.0 x 3.5 x 1.1mm

#### Features

Small size

Tight tolerance and Stability

RoHS compliant

### General Specification

Туре	SMD 6.0 x 3.5 - 4 Pads
Frequency Range	10.000MHz to 100.00MHz
Frequency Tolerance at 25°C	<u>+</u> 30ppm *
Frequency Stability	<u>+</u> 30ppm *
Operating Temperature	-10°C to +60°C *
Load Capacitance	8pF to 32pF / Series
Shunt Capacitance	7pF max *
Storage Temperature	-40°C to +85°C *
Drive Level	100μW *
Aging	± 5ppm max first year *

<sup>\*</sup> Can be changed according to Customer's requirement.

### • Drive Level Codes (μW)

### Load Capacitance Codes

12pF = A	12.5pF = B	14pF = C	16pF = D	17pF = E	18pF = F
20pF = G	25pF = H	30pF= I	32pF = J	33pF = K	Series = L
13pF = M	27pF = N	50pF = O	10pF = P	15pF = Q	22pF = R
15.8pF = S	8.5pF = T	8.2pF = U	40pF = V	9pF = W	11pF = X
13.8pF = Y	19.6pF = Z	6pF = a	7pF = d	8pF = e	19pF = f

### • Operating Temperature Codes(°C)

A = -10  to  +60 B	3 = -20  to  +70	C = -10  to  +70	I = -40  to  +85	X = -30  to  +80	W = -10  to  +50
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Pls contact us for the parameters you could not find in these tables.

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Website: www.newxtal.com Email: hkcrystal@incnets.com

## • Frequency Tolerance & Frequency Stability Codes (ppm)

P = + 10	S = + 20	$T = \pm 30$	U = + 50	V = + 100	W = + 5
	_	_	_	_	_

# • Frequency Stability vs. Operating Temperature

	<u>+</u> 10ppm	<u>+</u> 20ppm	<u>+</u> 30ppm	<u>+</u> 50ppm	<u>+</u> 100ppm
-10℃- +60℃	$\odot$	$\odot$	•	$\odot$	$\odot$
-10°C- +70°C	·	·	•	$\odot$	$\odot$
-20°C- +70°C	·	·	•	•	$\odot$
-40°C- +85°C			$\odot$	•	$\odot$

<sup>⊙</sup> Available

### • ESR (Series Resistance Rs) vs Standard Frequency, Vibration Mode & Codes

Frequency Range	ESR Max	Code	Vibration Mode	Code
(MHz)	$(\Omega)$			
10.000 - 13.000	80	0	AT Fund	A
13.000 - 13.999	50	2	AT Fund	A
14.000 - 19.999	40	4	AT Fund	A
20.000 - 48.000	40	4	AT Fund	A
40.000 - 100.00	100	b	3rd OT	a3

## Marking

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

**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.	Mar	April	May	June	July	Aug.	Sept	Oct	Nov	Dec
A	В	С	D	Е	F	G	Н	I	J	K	L

For Example:



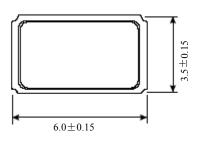
<sup>•</sup> Standard

## Ordering Information

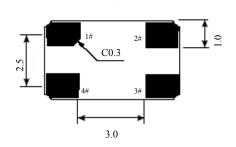
SMD	Terminal	Size	Drive Level	Load Capacitance	Operating Temperature	Frequency Tolerance	Frequency Stability	ESR	Vibration Mode	Frequency	Lead-free	Packing
			(µW)	(pF)	(℃)	(ppm)	(ppm)	$(\Omega)$		(MHz)		
SMD Crystal	0=2 Pads 1=4 Pads	B=6.0x3.5		See Tables							LF	TR
			100	16	-10 to +60	<u>+</u> 10	<u>+</u> 10	80	AT Fund		Lead-free	Tape & reel
s	1	В	A	D	A	P	P	0	A		LF	TR

For Example: S1BADAPP0A-12.000MLF/TR

#### Dimensions



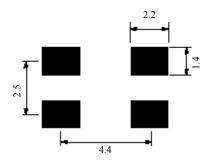
Top view



Bottom view



- 2# Connected with a cover
- 3# Crystal
- 4# Connected with a cover



Pad layout



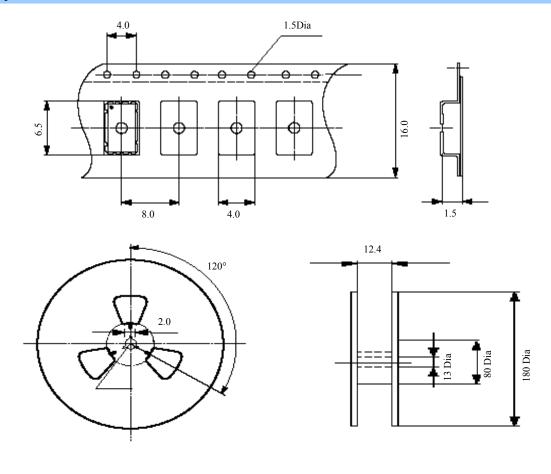
Side view

in mm

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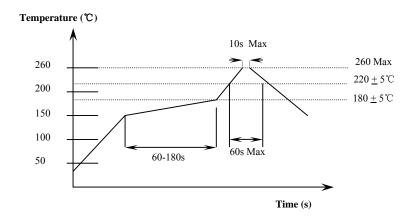
Website: www.newxtal.com Email: hkcrystal@incnets.com

# Taping Specification



\* Reel Quantity: 1,000pcs in mm

## Reflow Soldering Profile



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