



SMD Quartz Crystal - SMD Tuning Fork

SMD Version - 3.8 x 8.0mm

• Features

Low cost & wide applications
Low power consumption
RoHS compliant

• General Specification

Type	SMD 3.8 x 8.0
Frequency available	32.00KHz, 32.768KHz, 40.00KHz, 75.00KHz, 76.80KHz
Frequency Tolerance at 25 °C	$\pm 20\text{ppm}$, $\pm 30\text{ppm}$, $\pm 50\text{ppm}$, $\pm 100\text{ppm}$
Temperature Coefficient	$-0.034 \pm 0.006\text{ppm}/^{\circ}\text{C}^2$
Operating Temperature	-10 °C to +60 °C *
Load Capacitance	6.0 to 12.5pF
Shunt Capacitance	<1.8pF *
Storage Temperature	-40 °C to +85 °C *
Drive Level	1.0 μW *
Aging	$\pm 5\text{ppm max}$ first year *

* Can be changed according to Customer's requirement.

• Drive Level Codes (μW)

M = 1.0	B = 200	D = 50	E = 300	G = 500	I = 10
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• Load Capacitance Codes

12pF = A	12.5pF = B	6pF = a	8pF = e
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• Operating Temperature Codes (°C)

A = -10 to +60	B = -20 to +70	C = -10 to +70
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• Frequency Tolerance Codes (ppm)

S = ± 20	T = ± 30	U = ± 50	V = ± 100
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Pls contact us for the parameters you could not find in these tables.

NEWXTAL - New Crystal

Website: www.newxtal.com

Email: sales@newxtal.com

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• ESR (Series Resistance Rs) vs Standard Frequency

Frequency Range	ESR Max	Code
(KHz)	(K Ω)	
30.000 - 200.000	50	e

• Marking

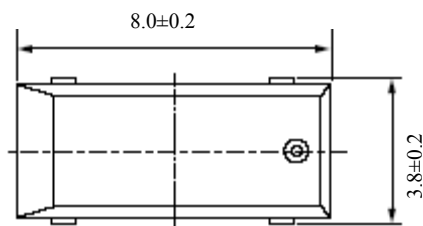
32.768

• Ordering Information

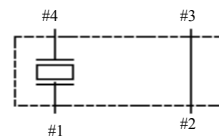
Drive Level	Load Capacitance	Operating Temperature	Frequency Tolerance	ESR	Type	Vibration Mode	Frequency	Lead-free	Packing
(μ W)	(pF)	($^{\circ}$ C)	(ppm)	(K Ω)			(KHz)		
See Tables					T = SMD 3.8 x 8.0	Blank=N/A	xx.xxxK	LF	TR
1.0	12.5	-20 to +70	± 20	50				Lead-free	Tape & reel
M	B	B	S	e	T			LF	TR

For Example: **MBBSeT-32.768KLF/TR**

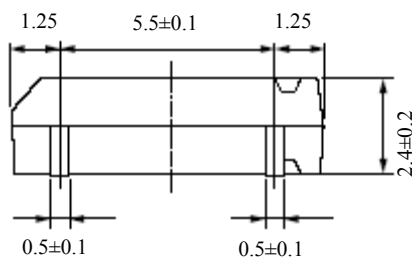
• Dimensions



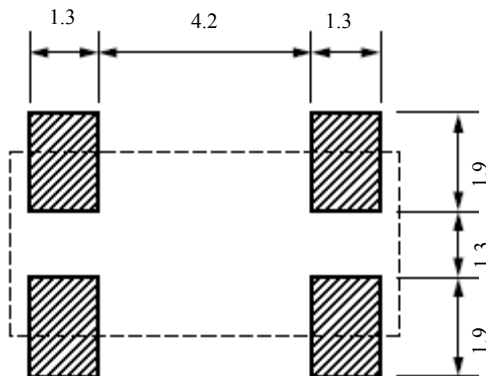
Top View



#1 Crystal
#2 N/C
#3 N/C
#4 Crystal
Do not connect to external with #2 and #3.



Side View



Pad Layout

in mm

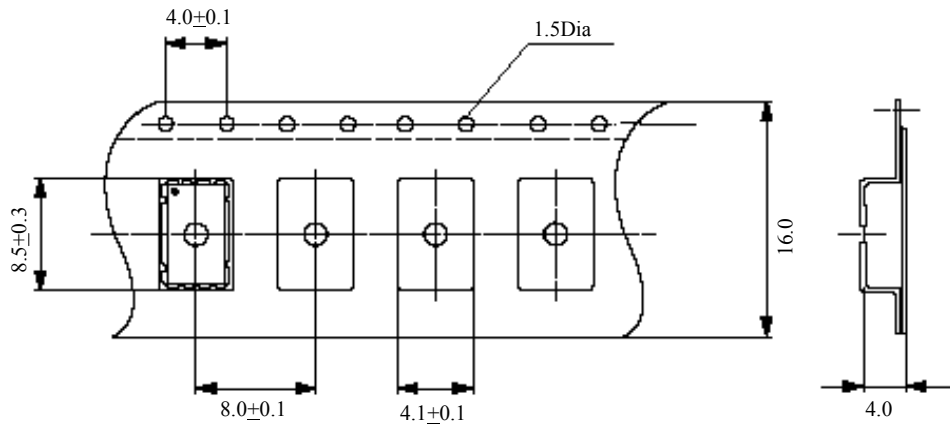
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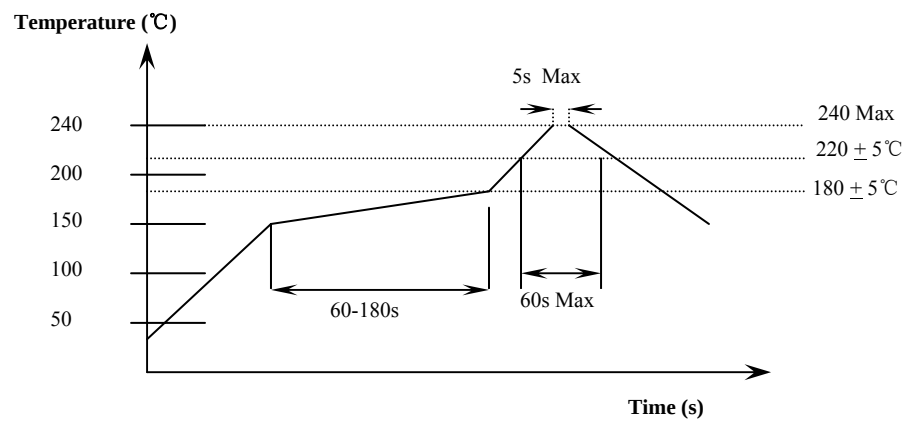
• Taping Specification



* Reel Quantity: 1,000pcs

in mm

• Reflow Soldering Profile



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