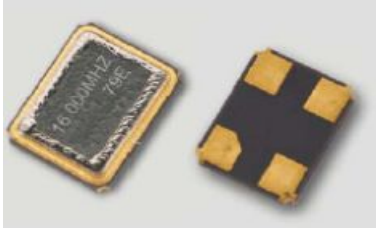


# EDCON-COMPONENTS



## Features

Compact and thin 3,2x2,5x0,65mm (typ.)  
 Both Sides supporting structure is advantageous to shock resistance  
 Excellent electrical Characteristics and environmental performance  
 for applications in mobile communications.  
 Enables automatic mounting, due to the adoption of the emboss  
 taping packages.

## Applications

This is highly precise small-sized surface-mounted crystal unit that can  
 be widely used in bluetooth, MP3 PDA, cellular wireless LAN, PCMCIA,  
 disc drivers, audio equipment.

## Specifications

Frequency Range:	f <sub>0</sub>	12.000Mhz ~ 50,000Mhz	Please contact us for ranges in frequency
Frequency Tolerance:	Δ f/f <sub>0</sub>	.+/- 30ppm max.	AT 25°C
Storage Temperatur Range:	T <sub>STG</sub>	. -40°C to +85°C	
Load Capacitance:	C <sub>L</sub>	9pf typ.	Please specify
Shunt Capacitance:	C <sub>0</sub>	5.0 pf Max.	
Drive Level:	DL	100μW Max.	
Insulation Resistance:	IR	500MΩ Min.	DC100V +/-15V
Aging ( First Year)	Δf/f <sub>0</sub>	.+/- 5ppm Max.	25°C +/- 3°C
Sealing:		1x10 <sup>-2</sup> μ Pa.m <sup>3</sup> /s Max.	
Shock Resistance:		. +/- 5ppm Max.	Conditions will vary depending on the frequency
Drop test of 3times on a hard board from 75cm height or shock test of 3000G x 0,3ms x 1/2sin wave x 3 directions			

**Table 1 Frequency vs Temperature Characteristics**

Frequency Stability vs Temperature Range (25°C +/-3°C)				
Temperature Range (°C)	Frequency Stability (PPM)			
	4 = +/-10	3 = +/-20	2 = +/-30	1 = +/-50
A= 0 0 to +50	√	√	√	√
B= -10 to +60	√	√	√	√
D= -20 to +70	√	√	√	√
F= -40 to +85			√	√

**Equivalent Series Resistance ( ESR R1)**

Frequency Range (MHZ)	Equivalent series resistance (Ω Max.)	Mode
12,000 ~ 12,999	100	Fundamental / AT
13,000 ~ 18,999	80	
19,000 ~ 50,000	60	

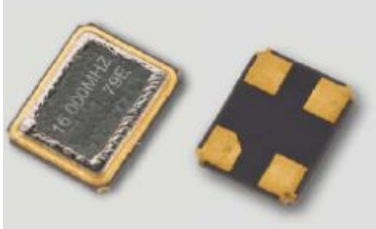
**SMD Quarz Crystal  
 3,2x2,5mm 4PAD**

Part No.: **O12040**

DRW:	Jose	CHKD	John	MATL:	Victoria	TOLERANCE	Mu Tao	DATE	20.10.2022
APPD:	Victor			FINISH	Oliver		Sheet No.		1 from 5

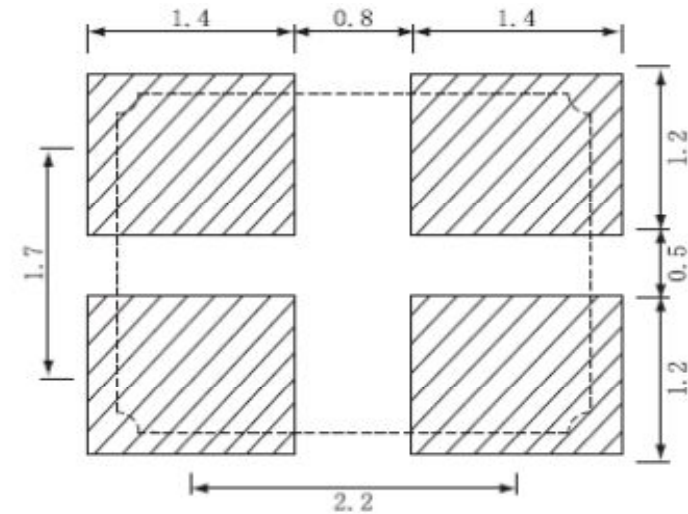
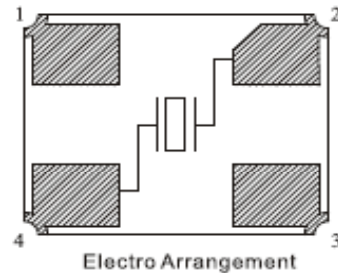
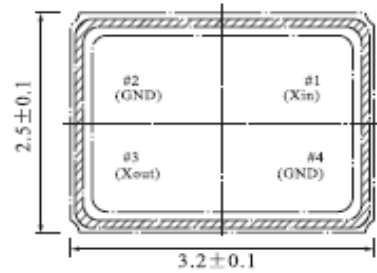
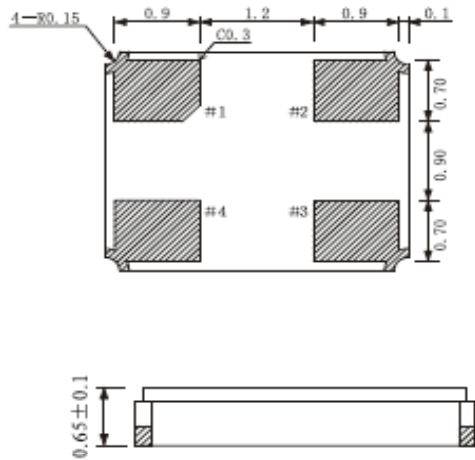
Customer:





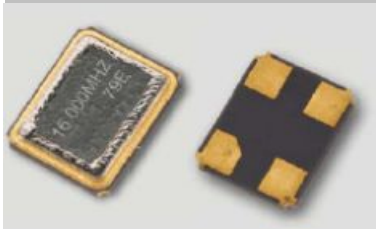
**Technical Dimensions Dimensions (mm)**

**P.C.B. Layout**



<b>SMD Quarz Crystal 3,2x2,5mm 4PAD</b>	
Part No.:	<b>O12040</b>
Customer:	

DRW:	Jose	CHKD	John	MATL:	Victoria	TOLERANCE	Mu Tao	DATE	20.10.2022
APPD:	Victor			FINISH	Oliver		Sheet No.		3 from 5



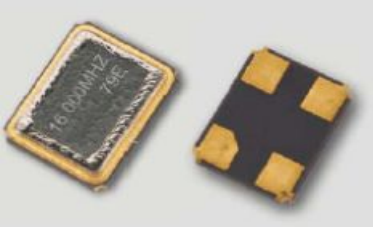
**Ordering Informations**

Serie	Frequency Range	Frequency Tolerance	Frequency Stabil. (ppM)	Temperature Range	Fundamental Mode	Load Capacitance	ROHS	Packing		
<b>O12040</b>	<b>12M00000</b>	<b>B</b>	<b>1</b>	<b>B</b>	<b>1</b>	<b>C</b>	<b>R</b>	<b>TR102</b>		

10 Letters (empty fill w. 0)	<b>A= +/-50ppm</b>	<b>1= +/-50ppm</b>	<b>A= -0°C ~ +50°C</b>	<b>1= Fundamental</b>	<b>B= 9pf</b>	<b>R= ROHS Conform</b>	<b>TR102= Tape /Reel 1000PCS</b>
	<b>B= +/-30ppm</b>	<b>2= +/-30ppm</b>	<b>B= -10°C ~ +60°C</b>	<b>2= 3th Overtone</b>	<b>C= 12pf</b>		
	<b>C= +/-20ppm</b>	<b>3= +/-20ppm</b>	<b>D= -20°C ~ +70°C</b>	<b>3= 5th Overtone</b>	<b>L= 15pf</b>	<b>BU101= Bulk Ware 100PCS</b>	
	<b>D= +/-10ppm</b>	<b>4= +/-10ppm</b>	<b>F= -40°C ~ +85°C</b>		<b>D= 16pf</b>		
					<b>E= 18pf</b>		
					<b>G= 20pf</b>		
					<b>H= 30pf</b>		
				<b>J= 32pf</b>			
				<b>K= 10pf</b>			

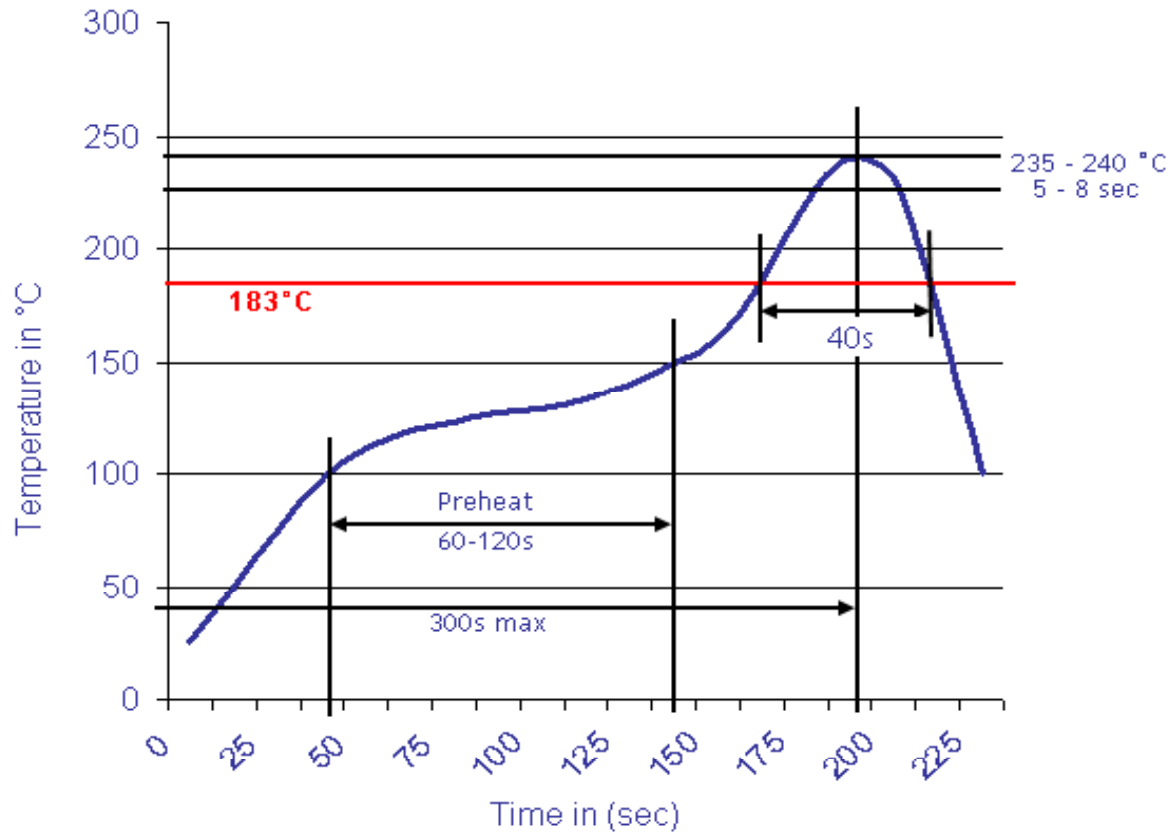
<b>SMD Quarz Crystal 3,2x2,5mm 4PAD</b>	
Part No.:	<b>O12040</b>
Customer:	

DRW:	Jose	CHKD	John	MATL:	Victoria	TOLERANCE	Mu Tao	DATE	20.10.2022
APPD:	Victor			FINISH	Oliver		Sheet No.		4 from 5



Soldering Profile

Classification Reflow Profile (JEDEC J-STD-020C)



<b>SMD Quarz Crystal</b>	
<b>3,2x2,5mm 4PAD</b>	
Part No.:	<b>O12040</b>
Customer:	

DRW:	Jose	CHKD	John	MATL:	Victoria	TOLERANCE	Mu Tao	DATE	20.10.2022
APPD:	Victor			FINISH	Oliver		Sheet No.	5 from 5	