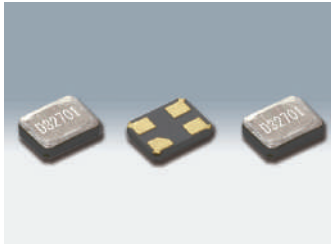


# SMD Crystal Resonators / MHz Band Crystal Resonators

## DSX1612S/DSX1612SL



DSX1612S Actual size □



DSX1612SL Actual size □

### ■ Features

- 1612 size ultra miniature and lightweight SMD crystal resonator.  
Height DSX1612S : 0.35mm  
DSX1612SL : 0.33mm max.
- High precision and high reliability  
(Frequency aging specification of  $\pm 1 \times 10^{-6}$ /1 year or  $\pm 3 \times 10^{-6}$ /5 years is available for cell phone or wireless communication systems etc.)
- Allowing for high density surface mounting.
- Moisture prevention packing is unnecessary.  
Moisture Sensitivity Level: LEVEL 1 (IPC/JEDEC J-STD-033)



### ■ Applications

- Small mobile devices for next generation such as mobile communications, short-range wireless modules, digital AV equipment and PC.
- Wearable devices

### ■ Standard Specification

Item	Type	DSX1612S			DSX1612SL			
		24 ~ 32MHz	32 ~ 40MHz	40 ~ 54MHz	32MHz	37.4MHz / 38.4MHz / 40MHz	48MHz	52MHz
Overtone Order		Fundamental						
Load Capacitance		8pF, 10pF, 12pF						
Drive Level		10 $\mu$ W (100 $\mu$ W max.)						
Frequency Tolerance		$\pm 20 \times 10^{-6}$ (at 25 $^{\circ}$ C)						
Series Resistance		200 $\Omega$ max.	150 $\Omega$ max.	100 $\Omega$ max.	120 $\Omega$ max.	60 $\Omega$ max.	30 $\Omega$ max.	50 $\Omega$ max.
Frequency Characteristics over Temperature		$\pm 30 \times 10^{-6}$ / -30 ~ +85 $^{\circ}$ C (Ref. To 25 $^{\circ}$ C)						
Storage Temperature Range		-40 ~ +85 $^{\circ}$ C						
Packing Unit		3000pcs./reel ( $\phi$ 180)						

Consult our sales representative for other specifications.

### ■ DSX1612S

### [mm] ■ DSX1612SL

### [mm]

■ DSX1612S		■ DSX1612SL	
<p>■ Dimensions</p> <p>1.6<math>\pm</math>0.1 1.2<math>\pm</math>0.1 0.35<math>\pm</math>0.05 0.99 0.69 0.49 0.39</p>	<p>■ Internal Connections (Top View)</p> <p>#1 &amp; #3 connected to quartz element #2 connected to the cover #4 open (unconnected) #2 &amp; #4 recommended GND connection</p>	<p>■ Dimensions</p> <p>1.6<math>\pm</math>0.1 1.2<math>\pm</math>0.1 0.33 max</p>	<p>■ Internal Connections (Top View)</p> <p>#1 &amp; #3 connected to quartz element #2 &amp; #4 connected to the cover #2 &amp; #4 recommended GND connection</p>
<p>■ Recommended Land Pattern (Top View)</p> <p>1.1 0.8 0.7</p>	<p>■ Recommended Land Pattern (Top View)</p> <p>1.1 0.8 0.7</p>		