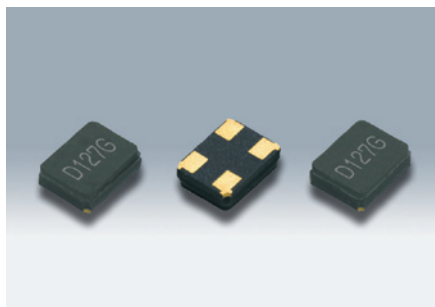


# SMD Crystal Resonators / MHz Band Crystal Resonators

## DSX221G ( For Industrial Equipment )



Actual size

### Features

- 2520 size miniature and lightweight SMD crystal resonator with a low profile of 0.75mm.
- Excellent heat resistance, 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.)
- Offers a wide range of frequencies from 12MHz up to 64MHz. Moisture prevention packing is unnecessary.
- Moisture Sensitivity Level: LEVEL 1 (IPC/JEDEC J-STD-033)
- AEC-Q200 Compliant



### Applications

- Industrial equipment
- Telecommunication products and other small devices such as DVC, DSC, PDA, PC, USB.
- Automotive applications such as RKE(Remote Keyless Entry), safety controls and multimedia devices(AEC-Q200 Compliant)

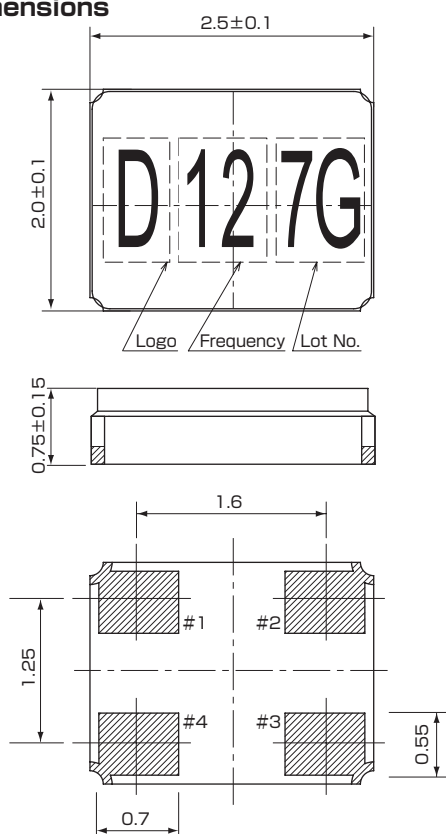
### Standard Specification

Item	Type	DSX221G				
		12 ~ 13MHz	13 ~ 16MHz	16 ~ 20MHz	20 ~ 27MHz	27 ~ 64MHz
Frequency Range		12 ~ 13MHz	13 ~ 16MHz	16 ~ 20MHz	20 ~ 27MHz	27 ~ 64MHz
Overtone Order		Fundamental				
Load Capacitance		8pF, 10pF, 12pF				
Drive Level		10 $\mu$ W (200 $\mu$ W max.)				
Frequency Tolerance		$\pm 20 \times 10^{-6}$ (at 25 $^{\circ}$ C)				
Series Resistance		250 $\Omega$ max.	150 $\Omega$ max.	100 $\Omega$ max.	80 $\Omega$ max.	60 $\Omega$ max.
Frequency Characteristics over Temperature		$\pm 50 \times 10^{-6} / -40 \sim +105^{\circ}$ C (Ref. to 25 $^{\circ}$ C)				
Storage Temperature Range		-40 ~ +105 $^{\circ}$ C				
Packing Unit		3000pcs./reel ( $\phi$ 180)				

Consult our sales representative for other specifications.

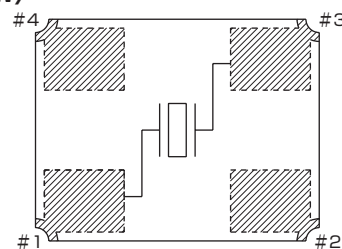
[mm]

### Dimensions



### Internal Connections

<Top View>



#1 & #3 connected to quartz element  
#2 & #4 open (unconnected)

### Recommended Land Pattern

<Top View>

