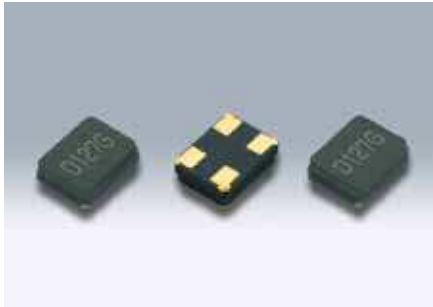


# SMD Crystal Resonators / MHz Band Crystal Resonators

## DSX221G



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 year are available for cell phone or wireless communications systems etc.)
- Offers a wide frequency range from a comparatively low 12MHz up to 64MHz.
- AEC-Q200 Compliant

### ■ Applications

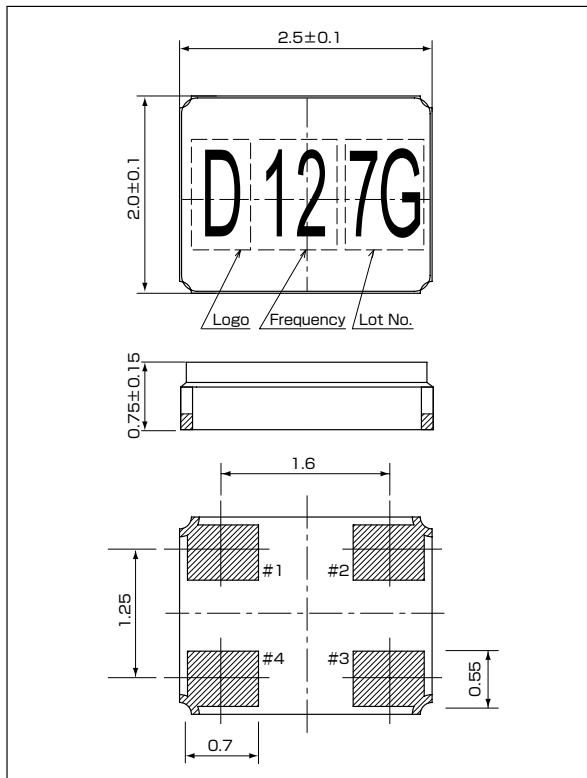
- Telecommunications products and other small devices such as DVC, DSC, PDA, PC, USB.
- Automotive applications such as RKE(Remote Keyless Entry), safety control and multimedia device(AEC-Q200 Compliant)

### ■ Standard Specification

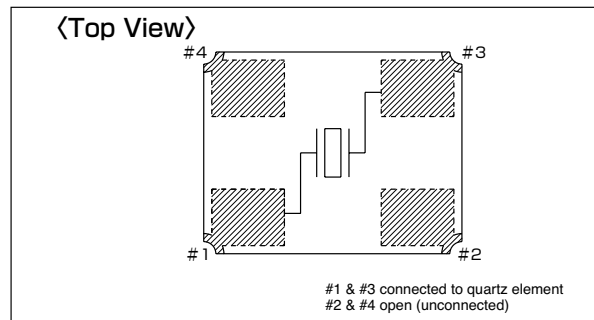
Item	Type	DSX221G				
		12 ~ 13MHz	13 ~ 16MHz	16 ~ 20MHz	20 ~ 27MHz	27 ~ 64MHz
Frequency Range		12 ~ 13MHz	13 ~ 16MHz	16 ~ 20MHz	20 ~ 27MHz	27 ~ 64MHz
Overtone Order		Fundamental				
Load Capacitance		Series, 8pF, 10pF, 12pF				
Drive Level		10 $\mu$ W (200 $\mu$ W max.)				
Frequency Tolerance		$\pm 10 \times 10^{-6}$ , $\pm 20 \times 10^{-6}$ , $\pm 30 \times 10^{-6}$ , $\pm 50 \times 10^{-6}$ (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		$\pm 8 \times 10^{-6}$ , $\pm 20 \times 10^{-6}$ , $\pm 30 \times 10^{-6}$ , $\pm 50 \times 10^{-6}$ / -10 ~ +60 $^{\circ}$ C (Ref. to 25 $^{\circ}$ C)				
		$\pm 12 \times 10^{-6}$ , $\pm 20 \times 10^{-6}$ , $\pm 30 \times 10^{-6}$ , $\pm 50 \times 10^{-6}$ / -20 ~ +70 $^{\circ}$ C (Ref. to 25 $^{\circ}$ C)				
		$\pm 15 \times 10^{-6}$ , $\pm 20 \times 10^{-6}$ , $\pm 30 \times 10^{-6}$ , $\pm 50 \times 10^{-6}$ / -30 ~ +85 $^{\circ}$ C (Ref. to 25 $^{\circ}$ C)				
Storage Temperature Range		-40 ~ +85 $^{\circ}$ C				
Packing Unit		3000pcs./reel ( $\phi$ 180)				
Standard Specification		Refer to page 32				

Consult our sales representative for other specifications.

### ■ Dimensions[mm]



### ■ Internal Connections



### ■ Recommended Land Pattern [mm]

