

SMD Crystal Resonators / MHz Band Crystal Resonators

DSX321G (for industrial equipment)



Actual size

■ Features

- 3225 size miniature and lightweight SMD crystal resonator.
Height DSX321G (over 12MHz): 0.75mm
DSX321G (12MHz or under): 0.85mm
- 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 7.9MHz up to 64MHz.
- AEC-Q200 Compliant
- Fully lead free option available.
- Frequency Characteristics over Temperature $\pm 50 \times 10^{-6}$ / -40 to $+105^\circ\text{C}$ is available for Industrial Equipment.



■ Applications

- Industrial equipment
- Telecommunication products, short-range wireless modules and other small devices such as DVC, DSC, PC.
- Automotive applications such as Bluetooth, wireless LAN, GPS/GNSS, RKE (Remote Keyless Entry), safety controls and multimedia devices (AEC-Q200 Compliant)

■ Standard Specification

Item	Type	DSX321G						
		7.9 to 9MHz	9 to 9.8MHz	9.8 to 11MHz	11 to 12MHz	12 to 20MHz	20 to 27MHz	27 to 64MHz
Frequency Range		7.9 to 9MHz	9 to 9.8MHz	9.8 to 11MHz	11 to 12MHz	12 to 20MHz	20 to 27MHz	27 to 64MHz
Overtone Order		Fundamental						
Load Capacitance		8pF, 10pF, 12pF						
Drive Level		10 μ W (200 μ W max.)						
Frequency Tolerance		$\pm 20 \times 10^{-6}$ (at 25 $^\circ\text{C}$)						
Series Resistance		400 Ω max.	300 Ω max.	150 Ω max.	100 Ω max.	80 Ω max.	60 Ω max.	50 Ω max.
Frequency Characteristics over Temperature		$\pm 50 \times 10^{-6}$ / -40 to $+105^\circ\text{C}$ (Industrial Equipment)						
Storage Temperature Range		-40 to $+105^\circ\text{C}$						
Packing Unit (1)		3000pcs./reel ($\phi 180$)						

(1) Moisture prevention packing is unnecessary.
Moisture Sensitivity Level: LEVEL1 (IPC/JEDEC J-STD-033)

Consult our sales representative for other specifications.

■ DSX321G (12MHz or under)

[mm] ■ DSX321G (over 12MHz)

[mm]

■ DSX321G (12MHz or under)		■ DSX321G (over 12MHz)	
■ Dimensions 3.2 ± 0.1 2.5 ± 0.1 0.85 ± 0.15 Logo / Frequency / Lot No.	■ Internal Connections (Top View) #4 #3 #1 #2 #1 & #3 connected to quartz element #2 & #4 open (unconnected)	■ Dimensions 3.2 ± 0.1 2.5 ± 0.1 0.75 ± 0.15 Logo / Frequency / Lot No.	■ Internal Connections (Top View) #4 #3 #1 #2 #1 & #3 connected to quartz element #2 & #4 open (unconnected)
■ Recommended Land Pattern (Top View) 2.1 2.2 1.6 1.7 0.9 1.4 1.2	■ Recommended Land Pattern (Top View) 2.1 2.2 1.6 1.7 0.9 1.4 1.2	■ Recommended Land Pattern (Top View) 2.1 2.2 1.6 1.7 0.9 1.4 1.2	■ Recommended Land Pattern (Top View) 2.1 2.2 1.6 1.7 0.9 1.4 1.2