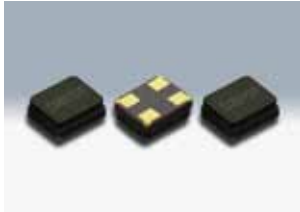
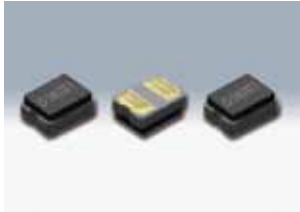


# SMD Crystal Resonators / MHz Band Crystal Resonators (For Automotive)

## DSX211G/DSX210GE



DSX211G



DSX210GE

Actual size □

### ■ Features

- Miniature and lightweight SMD crystal resonator (height DSX211G 0.65mm / DSX210GE 0.85mm)
- Excellent heat resistance, High precision and high reliability
- Offers a wide range of frequencies from 16MHz to 64MHz
- Enhanced durability of solder joint for thermal cycles : after 3000 Thermal cycle tests  $-40, +125^{\circ}\text{C}$  (DSX210GE)
- AEC-Q200 Compliant

### ■ Applications

- Automotive radio applications such as Bluetooth, wireless LAN, GPS/GNSS, multimedia devices and automotive camera
- ECU (engine, body work control), safety relations, car body controls, ABS, EPS (DSX210GE)

### ■ Standard Specification

Item	Type	DSX210GE			
		DSX211G			
Frequency Range	16 to 20MHz	20 to 24MHz	24 to 30MHz	30 to 36MHz	36 to 64MHz
Overtone Order		Fundamental			
Load Capacitance		8pF, 10pF, 12pF			
Drive Level		10 $\mu\text{W}$ (100 $\mu\text{W}$ max.)			
Frequency Tolerance		$\pm 30 \times 10^{-6}$ (at 25 $^{\circ}\text{C}$ )			
Series Resistance (Inside Atmosphere: nitrogen)		400 $\Omega$ max.	200 $\Omega$ max.	150 $\Omega$ max.	120 $\Omega$ max.
Series Resistance (Inside Atmosphere: vacuum)		300 $\Omega$ max.	150 $\Omega$ max.	100 $\Omega$ max.	60 $\Omega$ max.
Frequency Characteristics over Temperature		$\pm 100 \times 10^{-6} / -40$ to $+125^{\circ}\text{C}$ (Ref. to 25 $^{\circ}\text{C}$ )			
Storage Temperature Range		$-40$ to $+150^{\circ}\text{C}$			
Reliability		AEC-Q200			
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.

### ■ DSX211G

[mm]

### ■ DSX210GE

[mm]

■ DSX211G		■ DSX210GE	
<b>■ Dimensions</b> 	<b>■ Internal Connections</b> 	<b>■ Dimensions</b> 	<b>■ Internal Connections</b> 
<b>■ Recommended Land Pattern</b> 	<b>■ Recommended Land Pattern</b> 		