

MEMS OSCILLATOR, LOW POWER, -40C-85C, 50PPM 4 VDFN 2.0X2.5MM TUBE
70Y7381

Manufacturers	Microchip Technology, Inc
Package/Case	VDFN-4
Product Type	Integrated Circuits (ICs)
RoHS	
Lifecycle	



Images are for reference only

Please submit RFQ for DSC1001DI1-025.0000 or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

General Description

The DSC1001 is a silicon MEMS based CMOS oscillator offering excellent jitter and stability performance over a wide range of supply voltages and temperatures. The device operates from 1 to 150MHz with supply voltages between 1.8 to 3.3 Volts and temperature ranges up to -40°C to 105°C. The DSC1001 incorporates an all silicon resonator that is extremely robust and nearly immune to stress related fractures, common to crystal based oscillators. Without sacrificing the performance and stability required of today's systems, a crystal-less design allows for a higher level of reliability, making the DSC1001 ideal for rugged, industrial, and portable applications where stress, shock, and vibration can damage quartz crystal based systems. Available in industry standard packages, the DSC1001 can be "dropped-in" to the same PCB footprint as standard crystal oscillators.

Create an application specific part and order samples with the [CLOCKWORKS CONFIGURATOR](#) tool.

Features

Frequency Range: 1 to 150MHz

Exceptional Stability over Temperature

Operating voltage of 1.7V to 3.6V

Operating Temperature Range

Ext. Industrial -40°C to 105°C

Industrial -40°C to 85°C

Ext. Commercial -20°C to 70°C

Commercial 0°C to 70°C

Low Operating and Standby Current

5mA Operating (40MHz)

15µA Standby

Ultra Miniature Footprint

2.5mm x 2.0mm x 0.85mm

3.2mm x 2.5mm x 0.85mm

5.0mm x 3.2mm x 0.85mm

7.0mm x 5.0mm x 0.85mm

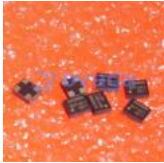
MIL-STD 883 Shock and Vibration Resistant

Pb-Free, RoHS, Reach SVHC Compliant

AEC-Q100 Reliability Qualified



Related Products



[DSC1001DL5-025.0000](#)

Microchip Technology, Inc
VDFN-4



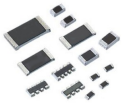
[DSC1001CL2-025.0000T](#)

Microchip Technology, Inc
VDFN-4



[DSC6083CE2A-032K768](#)

Microchip Technology, Inc
VDFN-4



[DSC1101CI5-100.0000T](#)

Microchip Technology, Inc
4-SMD, No Lead



[DSC1123CI2-200.0000](#)

Microchip Technology, Inc
VDFN-6



[DSC1001DI1-033.3333T](#)

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[DSC8001DL5](#)

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VDFN-4



[DSC1001AE1-003.6864T](#)

Microchip Technology, Inc
2.0 x 1.6 x 0.85 mm