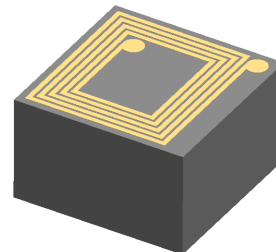


PLANAR CHIP INDUCTORS

Rev. 1

Features

- Gold Thickness: 3μ-3.8μ (120μ"-240μ") for HiQ
 - 1.8 GHz performance
- Low Loss Tangent and Dielectric Constant up to 18 GHz Applications
- Lines and Spaces down to 12μ (470μ")
- High Temperature Attachment and Applications
- RoHS Compliant



Description

SemiGen's Thin Film Planar Chip Inductors offer proven stability, very low loss, and excellent dielectric constant in a variety of Inductance values.

Electrical Specifications: T_A = +25 °C

Part Number	Number of Turns	Inductance Nom. (nH)	Inductance Min. (nH)	Inductance Max. (nH)	DC Resistance (Ω)	Q Min. (Coulomb)	Test Frequency (GHz)	Self-Resonant Frequency Min. (GHz)	Current Max. (mA)
10250Q	2.5	2.5	2.0	3.5	5	10	0.1	20	100
10350Q	3.5	4.5	4.0	6.0	8	10	0.1	20	100
10450Q	4.5	7.5	6.0	9.0	15	5	0.1	20	100

Absolute Maximum Ratings^{1,2}

Parameter	Absolute Maximum
Mounting Temperature	+400°C for 5 seconds
Junction Temperature ^{1,2}	+150°C
Operating Temperature	-65°C to +200°C

1. Exceeding any one or combination of these limits may cause permanent damage to this device.
2. SemiGen does not recommend sustained operation near these survivability limits.

Mechanical Specification (Silicon Body)

Parameter	Absolute Maximum
Substrate	Quartz 15 ± 2.0 mils thick
Solderable	Gold Plated Backside
Metallization	TiW / Pt / Au
Gold Bonding Pads	Front Contact (> .003" Dia.)

Handling Procedures

Please observe the following precautions to avoid damage:

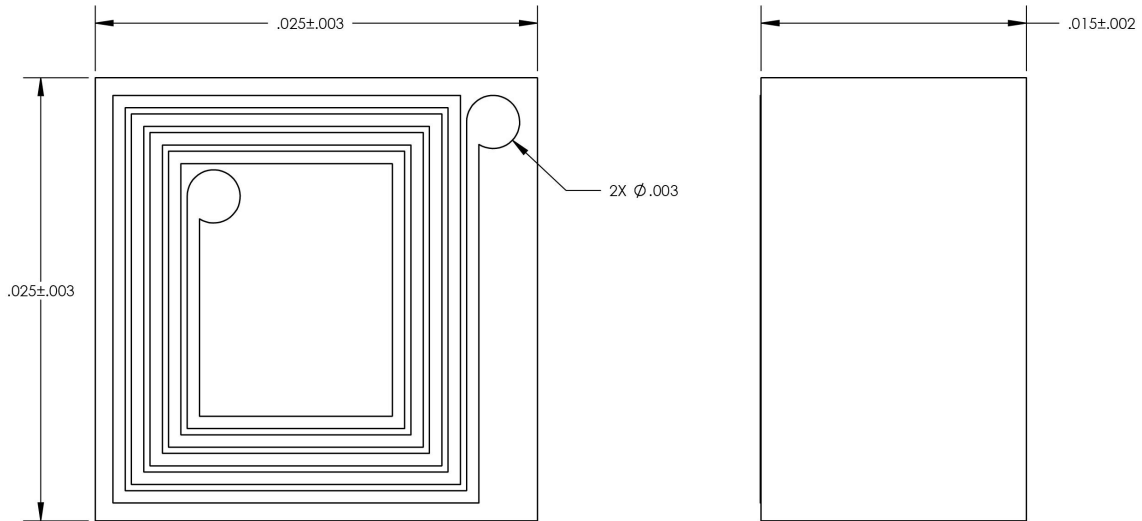
Static Sensitivity

These electronic devices are sensitive to electrostatic discharge (ESD) and can be damaged by static electricity. Proper ESD control techniques should be used when handling these devices.

PLANAR CHIP INDUCTORS

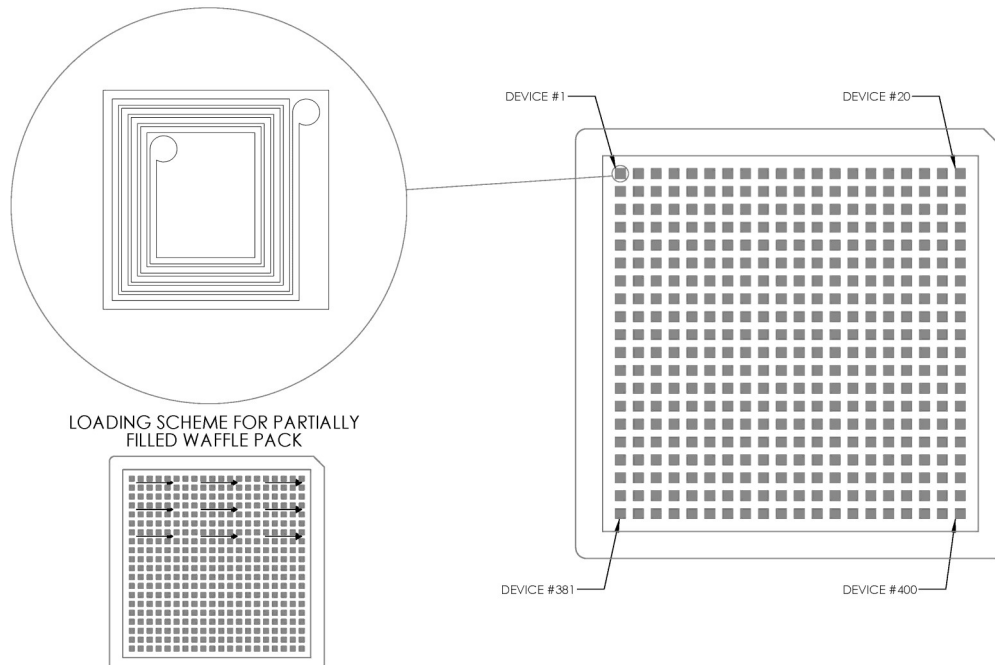
Rev. 1

Outline Drawing



Device Orientation Within Packaging

*Orientation may vary from image below



PLANAR CHIP INDUCTORS

Rev. 1

Ordering Information

Part Number	Package	Qty.
10250Q	Waffle Pack	400 per Tray
10350Q	Waffle Pack	400 per Tray
10450Q	Waffle Pack	400 per Tray
*FOR CUSTOM CHIPS USE DESIGNATION OF 1023x ("x" REPRESENTS NUMBER OF TURNS- SPIRAL CONFIGURATION)		

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