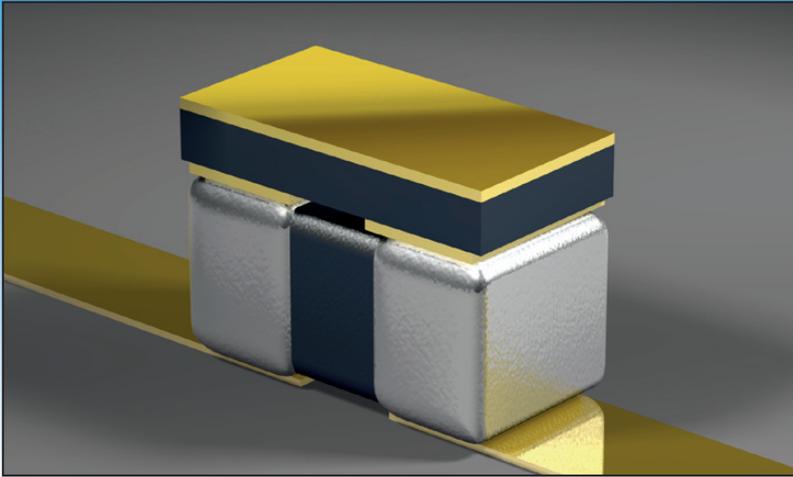


# Broadband Blocking Device



## Features

- X7R Temperature Stability (-55°C to +125°C)
- Low Frequency Stability
- Low Insertion Loss
- Solder or Epoxy attachment

## Functional applications

- Broadband Microwave/Millimeter Wave
- Test Equipment
- ROSA/TOSA
- SONET

## Specification

### Electrical

#### Temperature Coefficient of Capacitance

X7R  $\pm 15\%$  (-55°C to +125°C)

**SLC:** 120pF Guaranteed Minimum Value (GMV)

**MLC:** 100nF  $\pm 10\%$

#### Voltage

16WVDC

#### Dissipation Factor

3.0% @ 1MHz

#### Insulation Resistance

$> 10^3$  M $\Omega$

#### Assembly Process Temperature

250°C

#### Part Number

Part Number	Metallization
PX42UX104KCZX	Sn (200 $\mu$ m) / Ni (150-250 $\mu$ m)
PX42UX104KCSX	Au (5-15 $\mu$ m) / Ni (150-250 $\mu$ m)

#### Metallization

#### Packaging

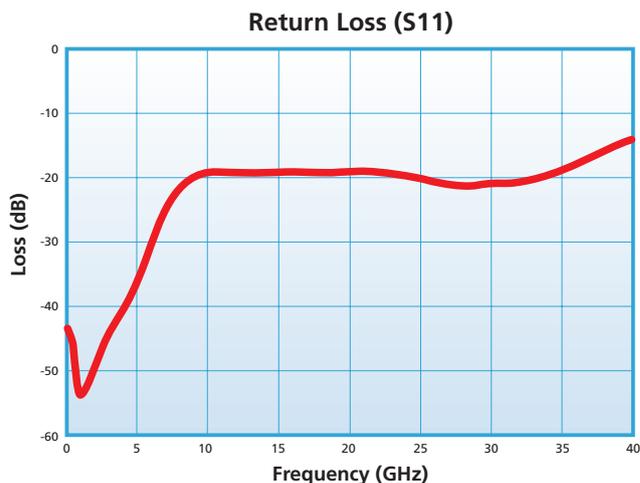
(T) Tape & Reel - (W) Waffle Pack

### Mechanical

#### Typical Shear force

**MLC/SLC:** 7.5N

## Performance Characteristics



DLI • Novacap • Syfer • Voltronics

www.dilabs.com

#### North America

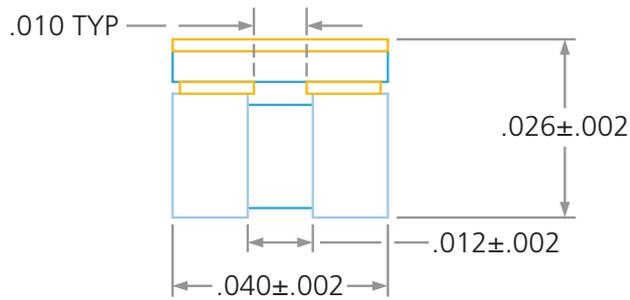
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Attachment Method - PX Series Broadband Blocking Device

Recommended attachment to soft or hard substrate using Solder:  
Recommended Micro Strip Layout:

1. Place a single drop of solder paste onto each micro-strip as illustrated; the edge of the solder shall be at least  $.001'' - .002''$  back from the edge of the trace to prevent filling the gap with solder.
2. Centering the termination gap of the capacitor within the gap in the micro strip, press with careful, even pressure onto the micro strip ensuring the terminations make good contact with the drops of solder paste.
3. Reflow according to the solder manufacturer's preferred profile, ensuring the reflow temperature does not exceed  $210^{\circ}\text{C}$ .
4. After the reflow step is completed, inspect joint for voids or excess flux and non-reflowed solder balls that can degrade performance or cause shorts across the gaps. Proper cleaning after the reflow process is crucial to avoiding performance degradation and discovering poor solder joints.

Mounting:

The part is designed for surface mounting using conventional reflow soldering techniques. In accordance with normal recommendations for ceramic MLCC's, hand soldering should be avoided as soldering irons could cause thermal damage or disconnections within the device. If rework or manual placing is necessary, then the use of a hot air pencil is recommended. Preheating the board can assist with manual soldering. Pb free compatible.

**Isopropanol and Methanol are both safe to use with soldered units.**

