

# MLO™ Diplexers DP03 SERIES

The AVX logo is displayed in a large, stylized blue font. It is set against a background of a grid of squares in shades of blue and grey, with some squares highlighted in yellow.

[AVX Website Link to Datasheet](#)

[WLAN/BT](#)

## Basic Overview

The 0603 Multilayer Organic (MLO™) Diplexer is a best in class low profile organic passive integrated component that is based on AVX's patented multilayer organic technology. AVX Diplexers support multiple wireless standards and have the lowest profile on the market today, while maintaining superb performance. As with all MLO™ components, MLO™ diplexers are CTE matched to most PCBs resulting in increased reliability over silicon and ceramic devices.

## Positioning

AVX takes it one step further by integrating existing MLO™ Capacitors and Inductors into the thinnest 0603 size diplexer package with the lowest insertion loss available in the industry.

## Applications

- WLAN/BT

## Top Selling Points

- Lowest profile on the market ( $\leq 0.50\text{mm}$ )
- LGA Terminations
- CTE match to most PCBs
- High Q
- Operating Temp. Range:  $-40^{\circ}\text{C}$  to  $+85^{\circ}\text{C}$

## Unique Features

Designed and manufactured using patented MLO™ Technology.

# MLO™ Diplexers DP03 SERIES



## How to Order

**DP**



Type

**03**



Size

**A**



Design

A

B

**5425**



Frequency  
(MHz)

**7**



Finish

7 = Au

T = NiSn

**TR**



Packaging  
Tape & Reel

## Series Cross Reference

AVX PN	Competitor	Competitor PN
DP03A5425TTR	Murata	LFD182G45DP3A299
		LFD182G45DP3B888
DP03B5425TTR		LFD182G45DP3A299
		LFD182G45DP3B888

## FAQ's

Q: What is an MLO Diplexer?

A: An MLO™ Diplexer allows two different frequencies to share a single channel. Conversely it multiplexes a signal into two frequencies depending on the type of filtering implemented.

Q: What are typical frequency ranges?

A: MLO™ 0603 Diplexers operate at frequencies specified by WLAN/BT standard.

Q: What does the "CTE match to PCB" of an MLO™ component refer to?

A: CTE (Coefficient of Thermal Expansion) match to PCB refers to a component's ability to change in size with temperature at a rate relative to that of the printed circuit board that the component is mounted on. Since MLO™ components are composed of similar basic materials as a printed circuit board, the CTE is actually matched to the CTE of the circuit board resulting in higher reliability.

\*\*Port layout may be different. See datasheet.

## Contact Information

### North America

Larry Eisenberger  
Sr. Marketing Applications Engineer  
TEL: +1 (864) 967-9304  
Email: Larry.Eisenberger@avx.com

### Europe

Neil Smyth  
Product Marketing Manager  
TEL: +44 28703 40423  
Email: smythn@flt.avx.com

### Asia

Frank Yang  
Product Marketing Manager  
TEL: +86 21 32551933-103  
Email: frank.yang@avx.com