

# Multilayer Organic (MLO™)



## 0805 WLAN Diplexer



### MLO™ TECHNOLOGY

The 0805 diplexer is a best in class low profile multilayer organic passive device that is based on AVX's patented multilayer organic high density interconnect technology. The MLO™ diplexer uses high dielectric constant and low loss materials to realize high Q passive printed elements such as inductors and capacitors in a multilayer stack up. The MLO™ diplexers can support multiple wireless standards such as WCDMA, CDMA, WLAN and GSM. These components which are less than 0.6mm in thickness are ideally suited for band switching for dual band systems. All diplexers are expansion matched to FR4 thereby resulting in improved reliability over standard Si and ceramic devices.

### APPLICATIONS

Multiband applications including WiFi, WiMax, GPS, and cellular bands

### LAND GRID ARRAY ADVANTAGES

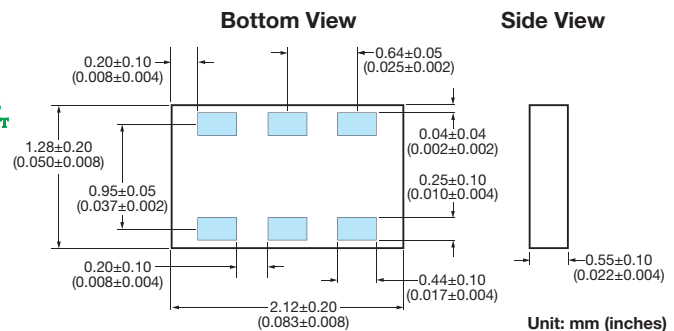
- Low Insertion Loss
- Excellent Solderability
- Low Parasitics
- Low Profile

### HOW TO ORDER

**DP** **05** **A** **5250** **7** **TR**  
 Type Size Design Frequency (MHz) Finish Packaging  
 7 = Au TR = 3 Kpcs  
 T = NiSn TR/500 = 500 pcs



### COMPONENT DIMENSIONS AND FUNCTIONS



### QUALITY INSPECTION

Finished parts are 100% tested for electrical parameters and visual characteristics.

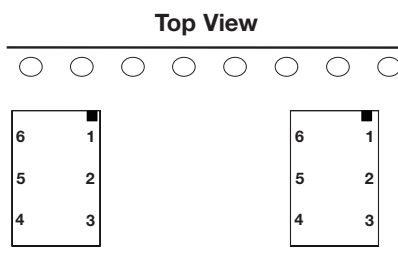
### OPERATING TEMPERATURE

-40°C to +85°C

### TERMINATION

Finishes available in Ni/Sn, Immersion Sn, Immersion Au and OSP coatings which are compatible with automatic soldering technologies which include reflow, wave soldering, vapor phase and manual.

### ORIENTATION IN TAPE



Terminal No.	Terminal Name
1	High Frequency Port
2	GND
3	Low Frequency Port
4	GND
5	Common Port
6	GND

PART NUMBER: DP05A52507TR

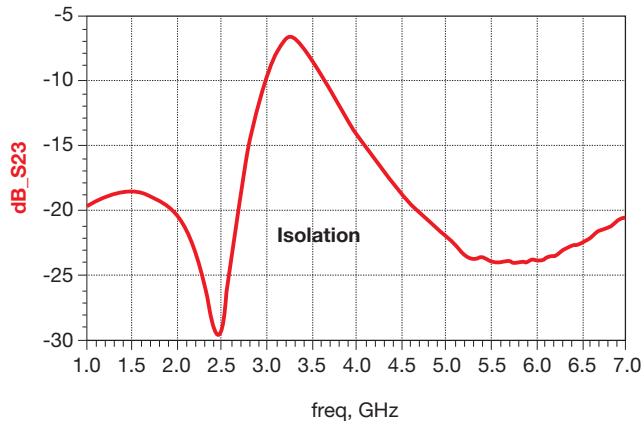
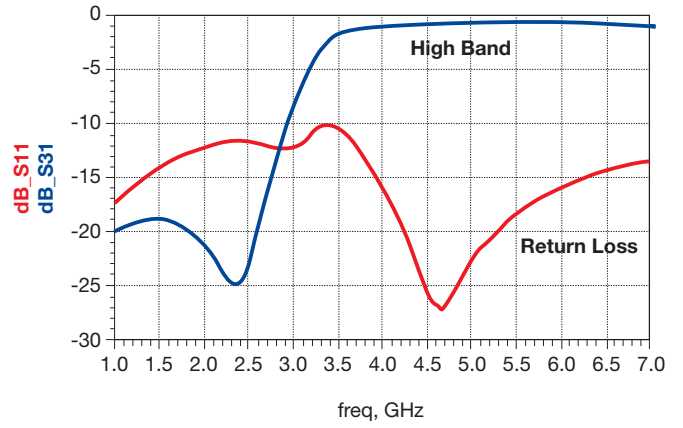
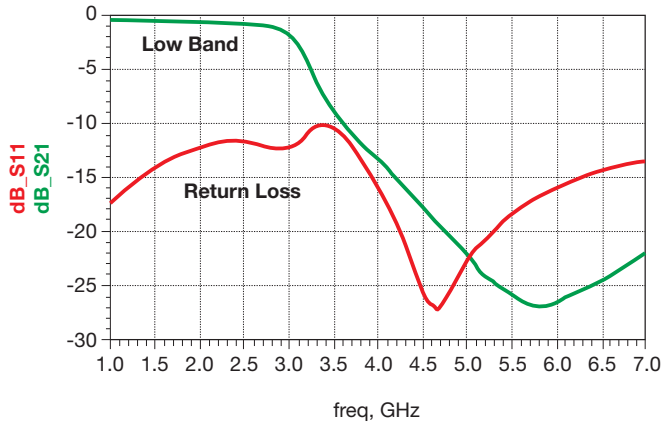
Specification @ 25°C	
Size [mm(inches)]	2.12 x 1.28 (0.083 x 0.050)
Height [mm(inches)]	0.55 (0.021)
Volume (mm <sup>3</sup> )	1.5
Frequency Range (F1) (MHz)	2450±50
Frequency Range (F2) (MHz)	5250±100
Insertion Loss (F1) (dB)	-0.5
Insertion Loss (F2) (dB)	-0.5
Attenuation (F1) at (F2) (dB)	-20
Attenuation (F2) at (F1) (dB)	-20
Return Loss (Lowband @ F1) (dB)	-12
Return Loss (Highband @ F2) (dB)	-12
Isolation (Lowband @ F1) (dB)	-25
Isolation (Highband @ F2) (dB)	-21

### POWER CAPACITY

4.5W Maximum



### S PARAMETER MEASUREMENTS



6

# Mouser Electronics

Authorized Distributor

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