### **Excellent Integrated System Limited**

Stocking Distributor

Click to view price, real time Inventory, Delivery & Lifecycle Information:

AVX Corporation DP05A1940TTR

For any questions, you can email us directly: <a href="mailto:sales@integrated-circuit.com">sales@integrated-circuit.com</a>



### Datasheet of DP05A1940TTR - DIPLEXER 1940 MHZ SMD Contact us: sales@integrated-circuit.com Website: www.integrated-circuit.com

## Multilayer Organic (MLO™)

# /AVXX RF

### 0805 WCDMA 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 passive elements such as inductors and capacitors in a multilayer stack up. The  $MLO^{\mathbb{M}}$ diplexers can support multiple wireless standards such as WCDMA, CDMA, WLAN, and GSM and are less than 0.6mm in thickness. These components 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.

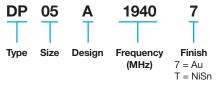
#### **APPLICATIONS**

Multiband applications including WCDMA, WLAN, WiMax, GPS, and cellular bands

## LAND GRID ARRAY ADVANTAGES

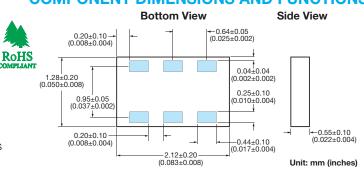
- · Low Insertion Loss
- Excellent Solderability
- Low Parasitics
- Low Profile

#### **HOW TO ORDER**





#### **COMPONENT DIMENSIONS AND FUNCTIONS**



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

#### **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**

Top View							
$\bigcirc$	0	0	0	0	0	0	$\bigcirc$
6	1				6	-	
5	2				5	2	!
4	3				4	3	
							J

#### **POWER CAPACITY**

4.5W Maximum

#### PART NUMBER: DP05A19407TR

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^3)	1.5		
Frequency Range (F1) (MHz)	892±68		
Frequency Range (F2) (MHz)	1940±230		
Insertion Loss (F1, at Fc) (dB)	-0.4		
Insertion Loss (F2, at Fc) (dB)	-0.65		
Attenuation (F1) at (F2) (dB)	-23		
Attenuation (F2) at (F1) (dB)	-20		
VSWR (Input @ F1)	1.3		
VSWR (Input @ F2)	1.4		
VSWR (Lowband @ F1)	1.4		
VSWR (Highband @ F2)	1.2		





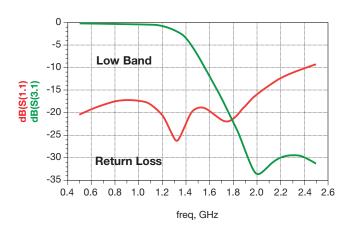
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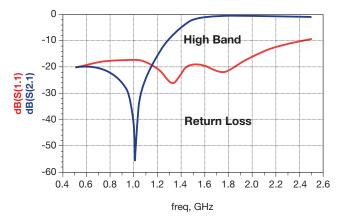
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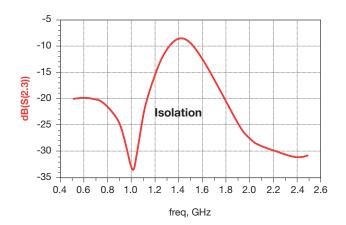
# /AV/X RF

### 0805 WCDMA Diplexer

#### S PARAMETER MEASUREMENTS







**Note:** Measurements were taken using an Anritsu 4 port VNA; Diplexer was mounted on a custom evaluation board. To reduce systematic errors from the VNA, the coaxial measurement cables, and evaluation board, a Short-Open-Load-Thru (SOLT) calibration was performed, using a custom fabricated calibration substrate. This is the most common coaxial calibration methods.

