Multilayer Organic (MLO®) Diplexers **0805 WCDMA**





MLO® TECHNOLOGY

The 0805 diplexer is a best in class low profile multilayer organic passive device that is based on KYOCERA AVX 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® 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

RoHS

LAND GRID ARRAY ADVANTAGES

TR

Packaging

Tape & Reel

TR/500 = 500 pcs

TR = 3 Kpcs

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

7

Finish

HOW TO ORDER





OUALITY 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



POWER CAPACITY 4.5W Maximum

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

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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S PARAMETER MEASUREMENTS





freq, GHz

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.

KUCCERA available online at www.avx.com/disclaimer/ by reference and should be reviewed in full before placing any order.