Multilayer Organic (MLO[®]) Diplexers 0805 WLAN/BT





MLO® TECHNOLOGY

The 0805 ML0[®] diplexer is best in class low profile multilayer organic passive device that is based on KYOCERA AVX patented multilayer organic high density interconnect technology. The ML0[®] 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 ML0[®] diplexers can support multiple wireless standards such as WCDMA, CDMA, WLAN and GSM. These components which are less than 0.5mm in thickness are ideally suited for band switching for dual band systems. All ML0[®] diplexers are expansion matched to FR4 thereby resulting in improved reliability over standard Si and ceramic devices.

APPLICATIONS

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

LAND GRID ARRAY ADVANTAGES

- Low Insertion Loss
- · Excellent Solderability
- Low Parasitics
- Matched CTE to PCB

HOW TO ORDER



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



POWER CAPACITY

4.5W Maximum

COMPONENT DIMENSIONS AND FUNCTIONS



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

PART NUMBER: DP05B54257TR

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
Pass Band Range (F1) (MHz)	2450 +/-50MHz
Pass Band Range (F2) (MHz)	5425 +/-525MHz
Insertion Loss (F1) (dB)	-0.5
Insertion Loss (F2) (dB)	-1.0
Attenuation (F1) 4800MHz - 6000MHz (dB)	-36
Attenuation 3 x (F1) (dB)	-31
Attenuation (F2) 1800MHz - 2500MHz (dB)	-26
Attenuation 2 x (F2) (dB)	-13
Attenuation 3 x (F2) (dB)	-15
VSWR (Input @ F1)	1.2
VSWR (Input @ F2)	1.7
VSWR (Lowband @ F1)	1.2
VSWR (Highband @ F2)	1.7

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

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S PARAMETER MEASUREMENTS



KUDECERA AWXX The Important Information/Disclaimer is incorporated in the catalog where these specifications came from or available online at www.avx.com/disclaimer/ by reference and should be reviewed in full before placing any order.

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