

UMD026A

Full Band 26 UMD Series Duplexer

Features

- Subset of Band 26 & extended Band 5 for North American uses
- Low Loss with High Rejection
- Superior power handling and reliability
- Universal footprint across all UMD Series frequency bands
- Available for either PCB mounting or with various connectors including SMA, SMP-Max, and other options.



Available as direct-solder to PCB or with various connector options.

ESTIMATE Part Dimensions: 64 × 29 × 16 mm • <105 g (excl. connectors)
Materials: Ag plated ceramic block with tin plated brass shield

Applications

- Wireless Infrastructure applications
- High-performance carrier-grade active antennas and small-cells for 4-10W at the antenna port.
- Wide-band DAS, Repeaters, or small-cells requiring multi-channel or carrier aggregation

Description

Ceramic duplexer supports a universal footprint across all FDD frequency bands < 1 GHz enabling the use of a common system PCB. Provides superior rejection, insertion loss, reliability, as well as both peak and average power handling compared to other duplexer technologies.

Electrical Specifications

Parameter	Frequency (MHz)	Typical at 25°C	Spec. at 25°C	Spec. over -40°C to +85°C
Nominal Impedance	-	50 ohms	-	-
Average Input Power	-	-	-	20.0 Watt max
Peak Input Power	-	-	-	200 Watt max
Passive Intermodulation (2x 5W)	-	-	-	-106 dBm

Antenna to UL Response

Passband Insertion Loss (5 MHz avg)	814 - 849	2.3 dB	2.5 dB max	2.6 dB max
Passband Return Loss	814 - 849	15 dB	14 dB min	14 dB min
Attenuation:	859 - 894	72 dB	70 dB min	70 dB min

DL to Antenna Response

Passband Insertion Loss (5 MHz avg)	859 - 894	2.3 dB	2.5 dB max	2.6 dB max
Passband Return Loss	859 - 894	15 dB	14 dB min	14 dB min
Attenuation:	814 - 849	77 dB	75 dB min	75 dB min

DL to UL Response

Attenuation for UL band	814 - 849	79 dB	77 dB min	77 dB min
Attenuation for Transition band	849 - 859	57 dB	55 dB min	55 dB min
Attenuation for DL band	859 - 894	74 dB	72 dB min	72 dB min

Note: CTS tests each unit to the critical specifications above. Subsequent audits may deviate due to repeatability among different test systems which shall not exceed these allowances.

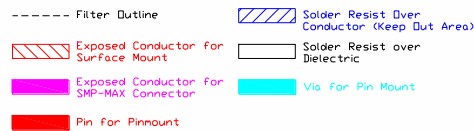
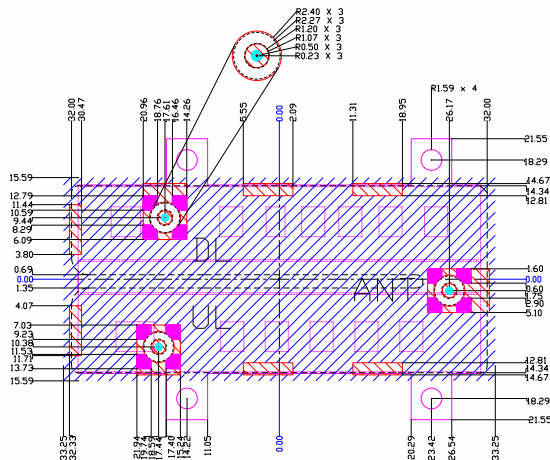
Specification Allowance	
Insertion Loss	0.1 dB
Return Loss	1.0 dB
Attenuation	1.0 dB

TBC = To be confirmed

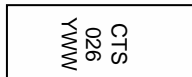
Mechanical Drawing

Dim.	Nominal (mm)	Tolerance (±mm or Max)
A	64.00	Max
B	29.00	Max
C		
D		
E		
F		
G		
H		
I		
J		
K		

PCB Layout (Top-Down View)

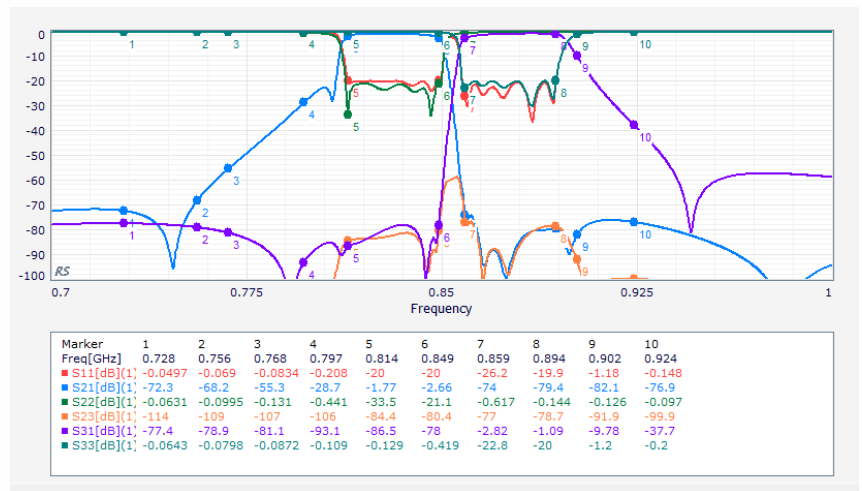


Packaging and Marking



Product is shipped in Pre-formed foam trays

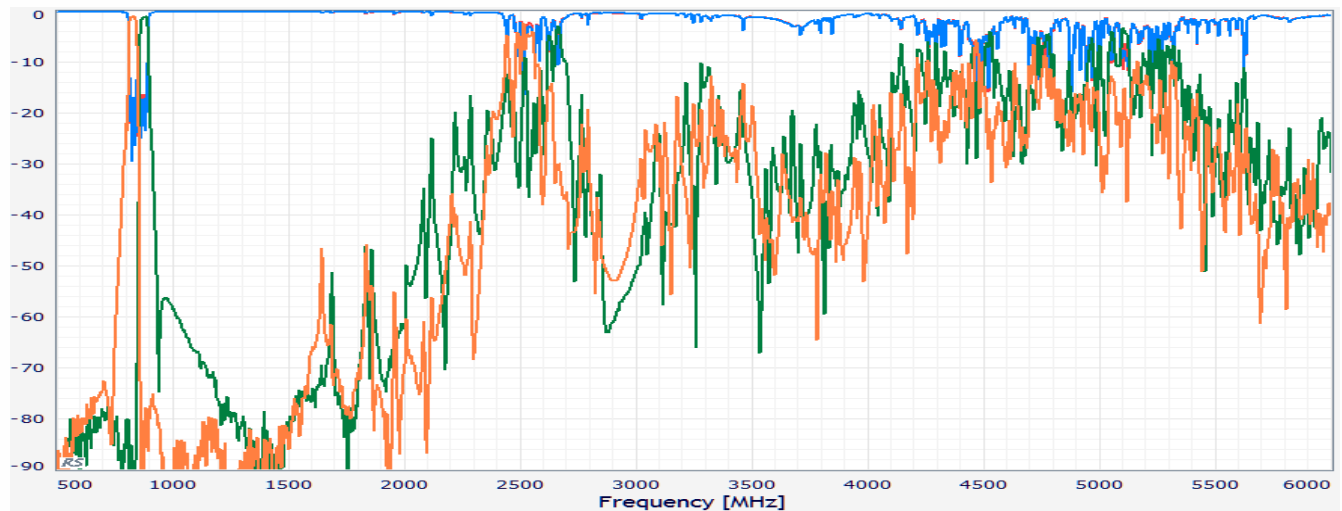
Electrical Response



The trays have xx slots each with one filter per slot. Boxes are packed with 12 Trays per box for a total of xx filters per box.

Electrical Specifications – Supplemental Spectrum Specifications

Parameter	Frequency (MHz)	Typical at 25°C	Spec. at 25°C	Spec. over -40°C to +85°C
Antenna to UL Response				
Attenuation:	1 - 728			>50 dB min
	728 - 756			>41 dB min
	756 - 768			>35 dB min
	768 - 797			15-18 dB min
	894-1690			36 dB min
	1690-1995			25 dB min
DL to Antenna Response				
Attenuation:	1 - 814			>60 dB min
	902 - 924			8 dB min
	924 - 1690			35 dB min
	1691 - 1920			25 dB min



Ordering Options

Part Number	Code	Connector Option Description
UMD026A	[blank]	No pins or connectors
	-C3	3 SMP-Com Male with limited detent
	-CF2	SMP-Com Male with limited detent antenna port + 2 SMP female cables
	-M3	3 SMP-Max Slide-type Male
	-NS2	N-type antenna port + 2 SMA Male (CMD only)
	-P3	3 thru-hole pins for soldering to PCB (UMD only)
	-S3	3 SMA Female