

# USD1326A - PRELIMINARY

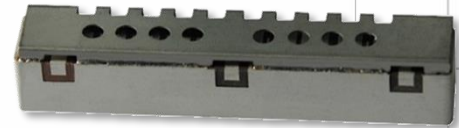
## Band 13+26UL / 26DL USD Series Duplexer

### Features

- Low Loss with High Rejection
- Superior power handling and reliability
- Universal footprint across all FDD frequency bands

### Applications

- Wireless Infrastructure applications
- High-performance carrier-grade small-cells using linearized PA for 1.0-2.0W at the antenna port.
- Wide-band pico-cells or small-cells requiring multi-channel or carrier aggregation.



**ESTIMATES**  
 Part Dimensions: 61.4 × 18.7 × 12.0 mm • 35.4 g  
 Materials: Ag plated ceramic block with tin plated brass shield

### Description

Surface mount ceramic duplexer supports a universal footprint across all FDD frequency bands 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	-	-	-	6.0 Watt max
Peak Input Power	-	-	-	60 Watt max

#### Antenna to UL Response

Passband Insertion Loss (5 MHz avg)	776 - 849	2.3 dB	2.6 dB max	2.6 dB max
Passband Return Loss	776 - 849	12 dB	11 dB min	11 dB min
Attenuation:	859 - 894	52 dB	50 dB min	50 dB min
	728 - 757	27 dB	25 dB min	25 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	12 dB	11 dB min	11 dB min
Attenuation:	776 - 849	54 dB	50 dB min	50 dB min

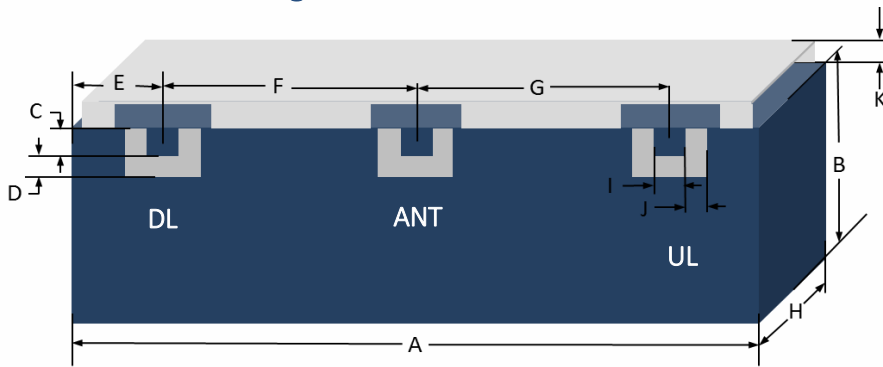
#### DL to UL Response

Attenuation for UL band	776 - 849	54 dB	50 dB min	50 dB min
Attenuation for DL band	859 - 894	52 dB	50 dB min	50 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.

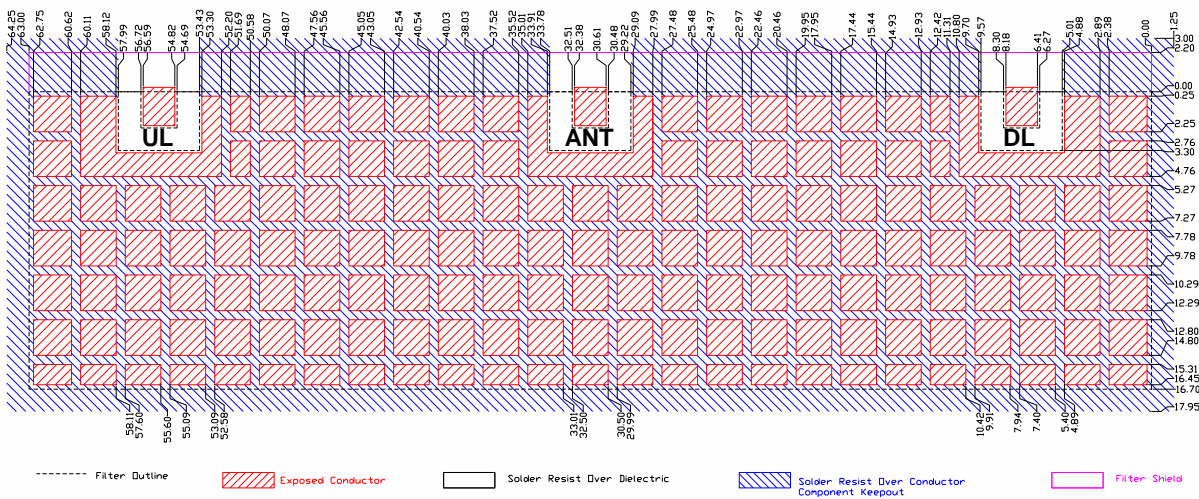
Specification Allowance	
Insertion Loss	0.1 dB
Return Loss	1.0 dB
Attenuation	1.0 dB

### Mechanical Drawing



Dim.	Nominal (mm)	Tolerance (±mm or Max)
A	61.40	Max
B	16.70	Max
C	2.03	0.13
D	1.27	0.13
E	6.49	0.13
F	24.21	0.13
G	24.21	0.13
H	12.0 est	Max
I	2.03	0.13
J	1.27	0.13
K	2.00	0.13

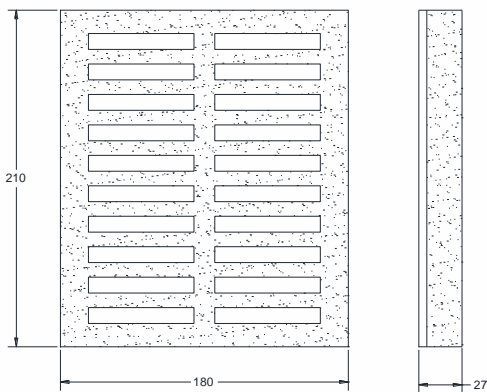
### PCB Layout



### Packaging and Marking

CTS  
1326  
YMM

Product is shipped in Pre-formed foam trays



The trays have 20 slots each with 1 filter per slot. Boxes are packed with 12 Trays per box for a total of 240 filters per box.

### Electrical Response

