

UPD350A - PRELIMINARY

3400-3480/3560-3600MHz UPD 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 Pico-cells using linearized PA for 0.25-0.5W and linear PA to 1.0W at the antenna port.
- Wide-band femto-cells or pico-cells requiring multi-channel or carrier aggregation.



Part Dimensions: 44.2 × 5.2 × 8.5 mm • 5.2 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	-	-	-	3.0 Watt max
Peak Input Power	-	-	-	30 Watt max

Antenna to UL Response

Passband Insertion Loss (20 MHz avg)	3400-3480	1.8 dB	2.0 dB max	2.2 dB max
Passband Ripple (20 MHz avg)	3400-3480			1.1 dB max
Passband Return Loss	3400-3480	13 dB	11 dB min	10 dB min
Attenuation:	3560-3600	57 dB	55 dB min	55 dB min
	2545-2595		40 dB min	40 dB min

DL to Antenna Response

Passband Insertion Loss (20 MHz avg)	3560-3600	2.6 dB	2.8 dB max	3.0 dB max
Passband Ripple (20 MHz avg)	3560-3600			1.2 dB max
Passband Return Loss	3560-3600	13 dB	11 dB min	10 dB min
Attenuation:	3400-3480	57 dB	55 dB min	55 dB min
	3625-5200	25 dB	23 dB min	23 dB min

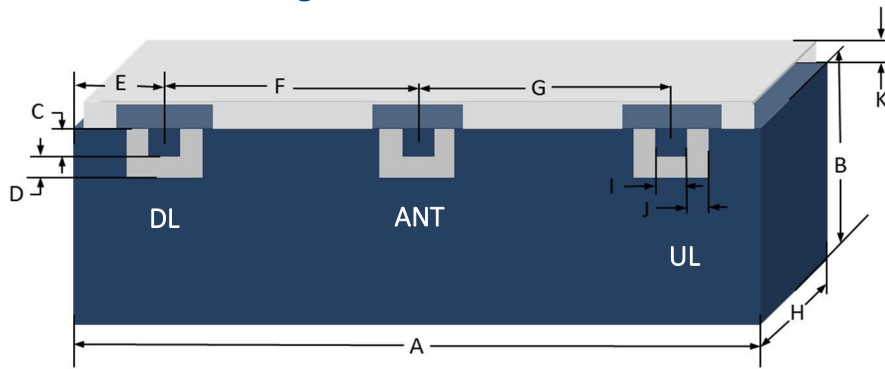
DL to UL Response

Attenuation for UL band	3400-3480	57 dB	55 dB min	55 dB min
Attenuation for DL band	3560-3600	57 dB	55 dB min	55 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.

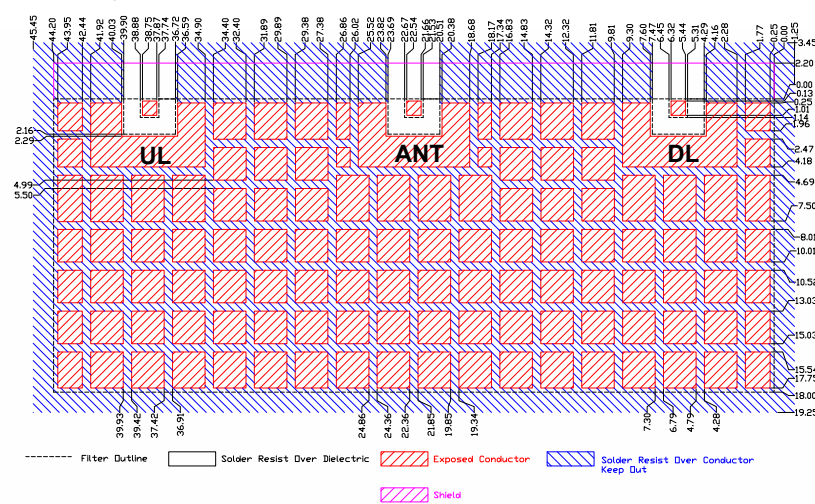
Specification Allowance	
Insertion Loss	0.1 dB
Return Loss	1.0 dB
Attenuation	1.0 dB

Mechanical Drawing

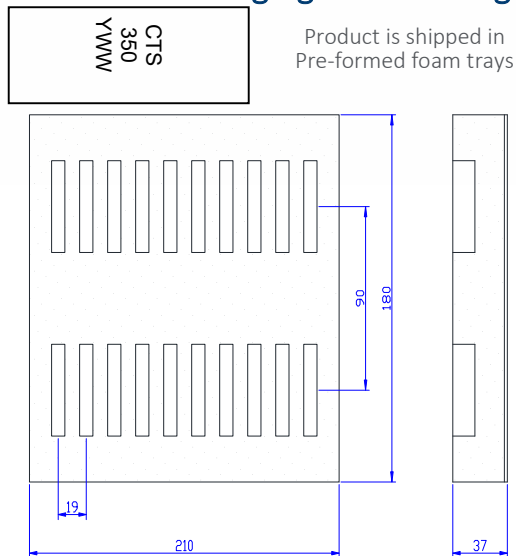


Dim.	Nominal (mm)	Tolerance (±mm or Max)
A	43.90	0.30
B	3.20	0.30
C	1.10	0.13
D	1.10	0.13
E	5.73	0.13
F	16.22	0.13
G	16.22	0.13
H	8.30	0.20
I	1.00	0.13
J	1.00	0.13
K	1.50	0.20

PCB Layout



Packaging and Marking



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

Electrical Response

