

UPD030A - PRELIMINARY

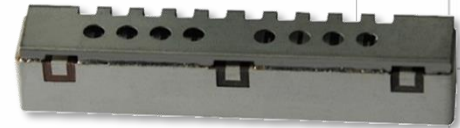
Band 30 UPD Series Duplexer

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 × 8.1 × 8.5 mm • ??? 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 (5 MHz avg)	2305-2315	2.6 dB	2.8 dB max	3.0 dB max
Passband Return Loss	2305-2315	14 dB	12 dB min	12 dB min
Attenuation: (5 MHz avg)	2350-2360	58 dB	56 dB min	56 dB min
	1-2200	22 dB	20 dB min	20 dB min
	2361-2690	55 dB	38 dB min	38 dB min

DL to Antenna Response

Passband Insertion Loss (5 MHz avg)	2350-2360	2.6 dB	2.8 dB max	3.0 dB max
Passband Return Loss	2350-2360	14 dB	12 dB min	12 dB min
Attenuation: (5 MHz avg)	2305-2315	62 dB	60 dB min	60 dB min
	1-2300	47 dB	43 dB min	43 dB min
	2402-2483	20 dB	18 dB min	18 dB min
	2496-2690	30 dB	28 dB min	28 dB min

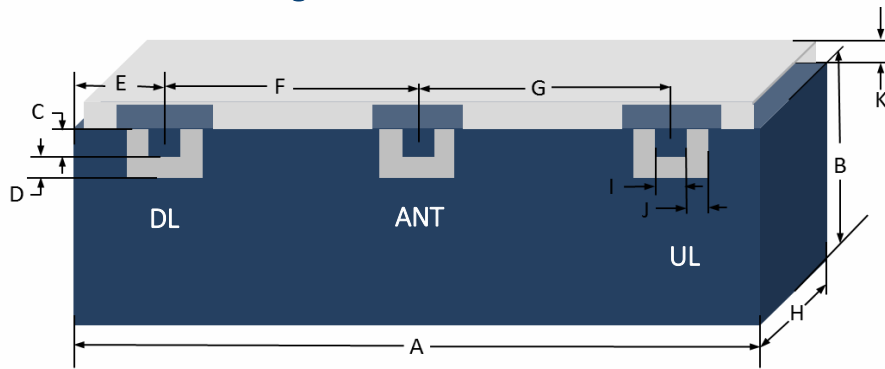
DL to UL Response

Attenuation for UL band (5 MHz avg)	2305-2315	62 dB	60 dB min	60 dB min
Attenuation for DL band (5 MHz avg)	2350-2360	59 dB	56 dB min	56 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.

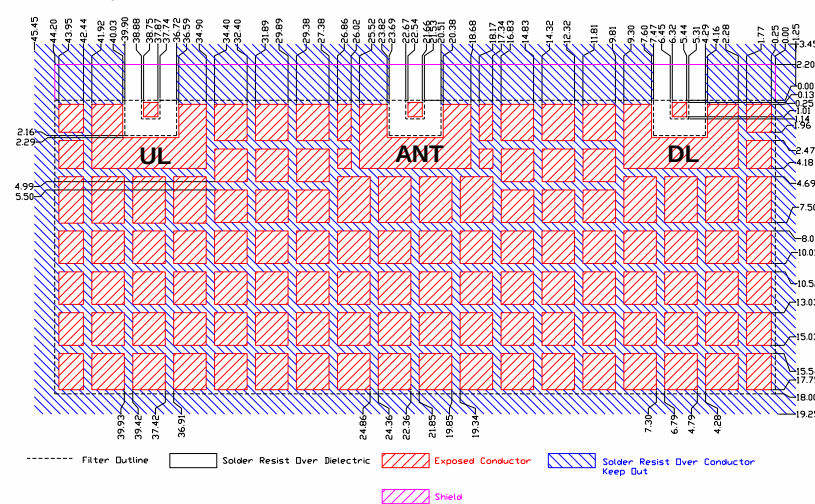
Specification Allowance	
Insertion Loss	0.1 dB
Return Loss	1.0 dB
Attenuation	1.0 dB

Mechanical Drawing

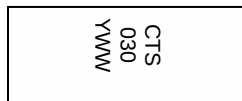


Dim.	Nominal (mm)	Tolerance (±mm or Max)
A	43.9	0.30
B	6.10	0.30
C	1.10	0.13
D	1.10	0.13
E	5.88	0.13
F	16.22	0.13
G	16.22	0.13
H	8.30	0.20
I	1.00	0.13
J	1.00	0.13
K	1.50	0.20

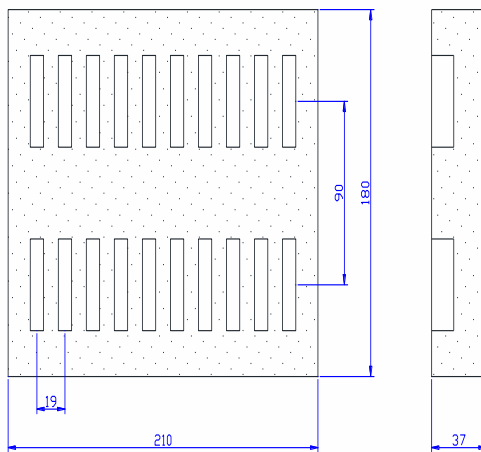
PCB Layout



Packaging and Marking



Product is shipped in Pre-formed foam trays



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

