

UPD014A

Band 14 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: 43.7 × 14.1 × 8.4 mm • 21.8 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)	788-798	1.9 dB	2.5 dB max	2.6 dB max
Passband Return Loss	788-798	15 dB	12 dB min	12 dB min
Attenuation:	758-768	56 dB	54 dB min	54 dB min
	698-758	46 dB	37 dB min	37 dB min
	818-858	15 dB	10 dB min	10 dB min
	859-894	42 dB	37 dB min	37 dB min

DL to Antenna Response

Passband Insertion Loss (5 MHz avg)	758-768	1.9 dB	2.5 dB max	2.6 dB max
Passband Return Loss	758-768	15 dB	12 dB min	12 dB min
Attenuation:	788-798	62 dB	59 dB min	59 dB min
	698-716	32 dB	30 dB min	30 dB min
	777-787	32 dB	30 dB min	30 dB min

DL to UL Response

Attenuation for UL band (5 MHz avg)	788-798	63 dB	61 dB min	61 dB min
Attenuation for DL band (5 MHz avg)	758-768	58 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.

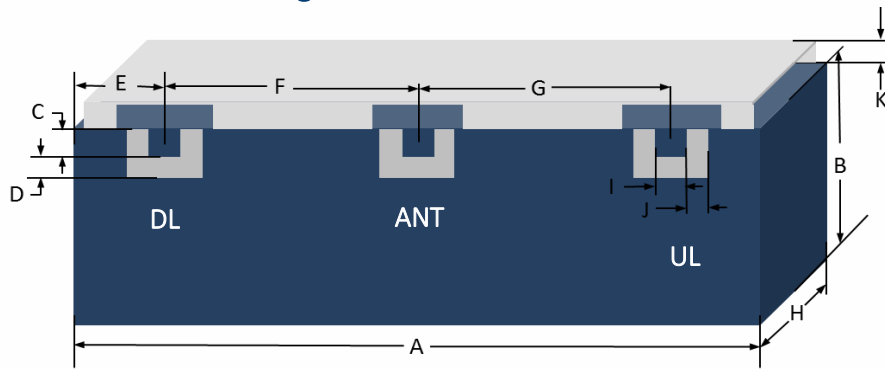
Specification Allowance	
Insertion Loss	0.1 dB
Return Loss	1.0 dB
Attenuation	1.0 dB



PRELIMINARY - UPD014A

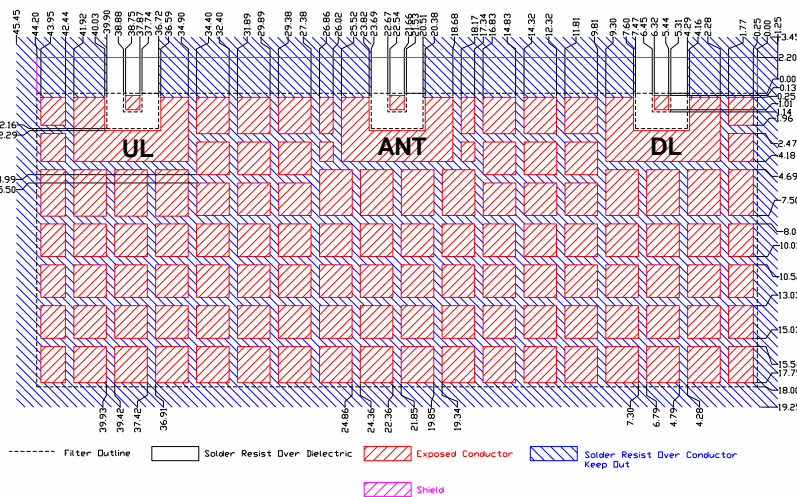
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Mechanical Drawing

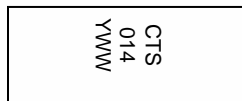


Dim.	Nominal (mm)	Tolerance (±mm or Max)
A	43.4	0.30
B	12.1	0.30
C	1.10	0.13
D	1.10	0.13
E	5.88	0.13
F	16.22	0.13
G	16.22	0.13
H	8.20	0.20
I	1.00	0.13
J	1.00	0.13
K	1.50	0.20

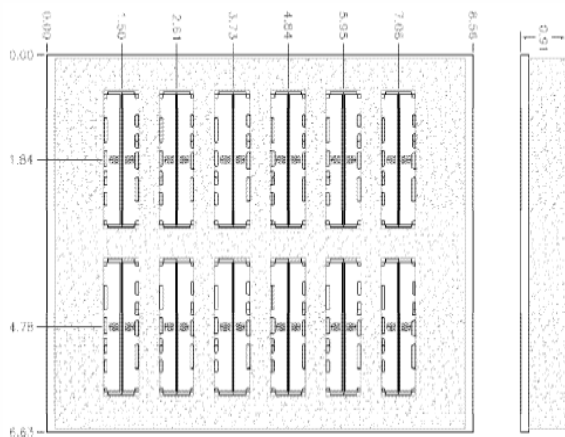
PCB Layout



Packaging and Marking



Product is shipped in
Pre-formed foam trays



The trays have 12 slots each with 2 filters per slot. Boxes are packed with 5 Trays per box for a total of 120 filters per box.

Electrical Response

