

UPD025A - PRELIMINARY

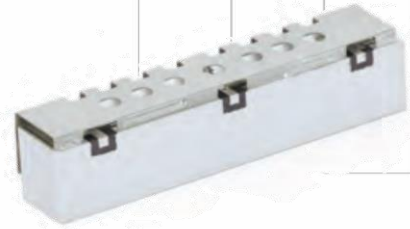
Band 2 UPD Series Duplexer

Features

- Extension of Band 25 to include Downlink of B70
- 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: 44.3 × __ × __ mm • 11.7 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)	1850-1910	3.0 dB max EST
(5 MHz avg)	1910-1915	4.2 dB max EST
Passband Return Loss	1850-1915	12 dB min
Attenuation: (5 MHz avg)	1930-2020	52 dB min EST
	2305-2690	24 dB min

DL to Antenna Response

Passband Insertion Loss (5 MHz avg)	1935-2020	3.2 dB max EST
(5 MHz avg)	1930-1935	4.5 dB max EST
Passband Return Loss	1930-2020	12 dB min
Attenuation:	1850-1915	55 dB min EST
	1-1849	27 dB min

DL to UL Response

Attenuation for UL band (5MHz avg)	1850-1995	55 dB min EST
Attenuation for DL band (5MHz avg)	1930-2020	52 dB min EST

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.

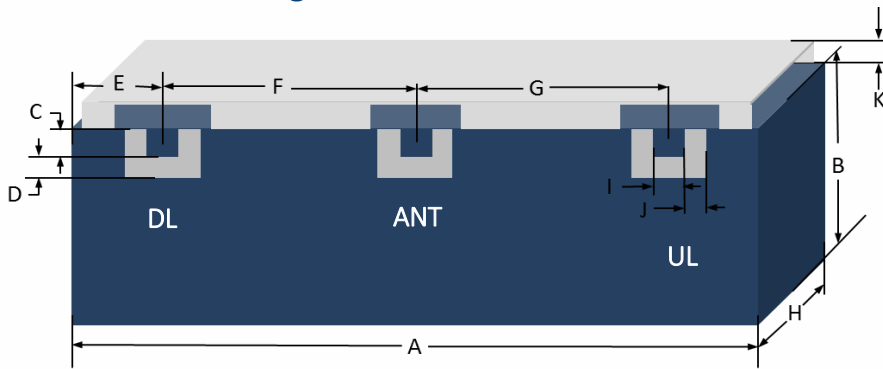
Specification Allowance	
Insertion Loss	0.1 dB
Return Loss	1.0 dB
Attenuation	1.0 dB



PRELIMINARY - UPD025A

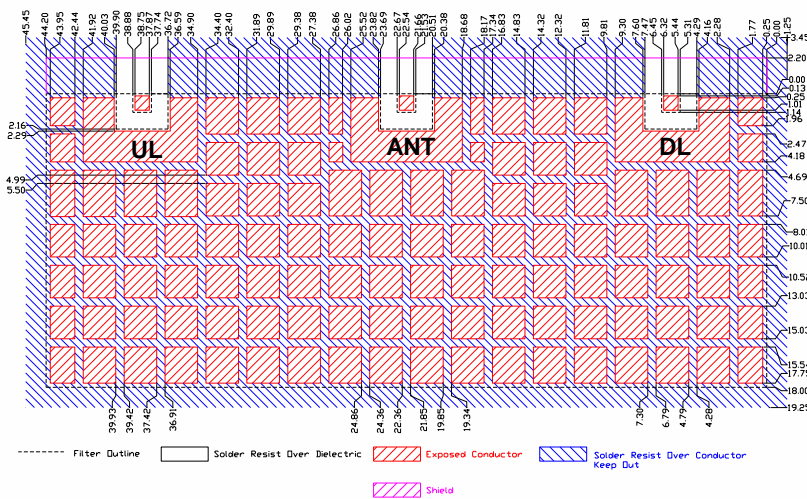
Band 2 UPD Series Duplexer

Mechanical Drawing

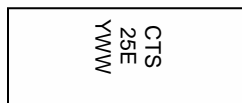


Dim.	Nominal (mm)	Tolerance (±mm or Max)
A	43.90 ?	0.30
B	7.90 ?	0.30
C	1.10	0.13
D	1.10	0.13
E	5.88 ?	0.13
F	16.22	0.13
G	16.22	0.13
H	8.20 ?	0.20
I	1.00	0.13
J	1.00	0.13
K	1.60	0.20

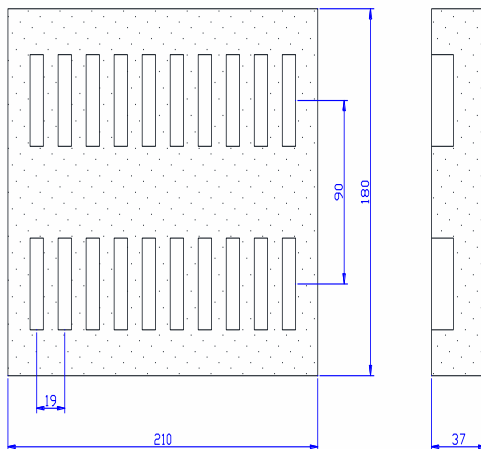
PCB Layout



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

