

# **UPD066E - PRELIMINARY**Band 66 UPD Series Duplexer

#### **Features**

- Extension of Band 66 to include Uplink 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:  $40.0 \times 10.5 \times 8.3 \text{ mm} \cdot 10.7 \text{ g}$ 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)	1695-1780			<2.5 dB max EST
Passband Return Loss	1695-1780			12 dB min EST
Attenuation:	2110-2200			>58 dB min EST
	1930-2020			37 dB min EST
	1850-1920			20 dB min EST
DL to Antenna Response				
DL to Antenna Response Passband Insertion Loss (5 MHz avg)	2110-2200			<2.5 dB max EST
·	2110-2200 2110-2200			<2.5 dB max EST 12 dB min EST
Passband Insertion Loss (5 MHz avg)				
Passband Insertion Loss (5 MHz avg) Passband Return Loss	2110-2200			12 dB min EST
Passband Insertion Loss (5 MHz avg) Passband Return Loss	2110-2200 1695-1780			>61 dB min EST
Passband Insertion Loss (5 MHz avg) Passband Return Loss	2110-2200 1695-1780 1781-1920			12 dB min EST >61 dB min EST 37 dB min EST
Passband Insertion Loss (5 MHz avg) Passband Return Loss	2110-2200 1695-1780 1781-1920 1930-2020			12 dB min EST >61 dB min EST 37 dB min EST 20 dB min EST
Passband Insertion Loss (5 MHz avg) Passband Return Loss Attenuation:	2110-2200 1695-1780 1781-1920 1930-2020			12 dB min EST >61 dB min EST 37 dB min EST 20 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

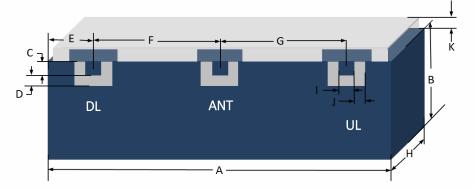
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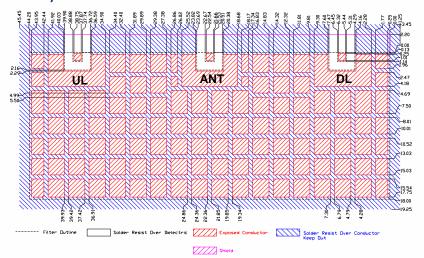
Band 66 UPD Series Duplexer

#### **Mechanical Drawing**

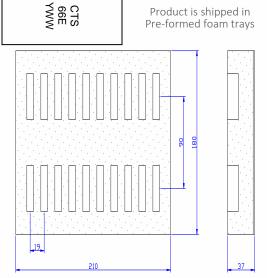


Dim.	Nominal (mm)	Tolerance (±mm or Max)
Α	39.75	0.25
В	8.50	0.30
С	1.10	0.13
D	1.10	0.13
Е	3.66	0.13
F	16.22	0.13
G	16.22	0.13
Н	8.10	0.20
1	1.00	0.13
J	1.00	0.13
K	1.50	0.20

### **PCB** Layout

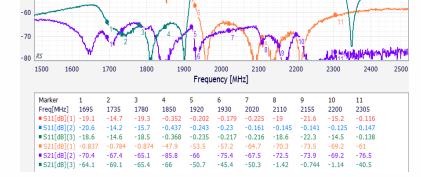


## Packaging and Marking



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



-30 -40 -50