

# **PRELIMINARY**

# **HPX0103A**

**Band 1/3 Diplexer** 

#### **Features**

- Low Loss
- Low Ripple
- High Rejection

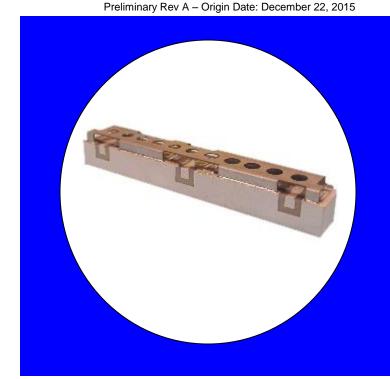
#### **Description**

Surface mount, silver (Ag) coated ceramic duplexer. Developed for use in Small Cell Wireless Infrastructure applications.

Weight: 20.8 grams typical

Material: Filter is composed of a ceramic block plated with Ag and a shield made of nickel silver plated steel.

Filter complies with RoHS standards.



#### **Electrical Specifications**

	Frequency	Typical @	Spec. @	Spec. over
Parameter	(MHz)	25°C	25°C	-40°C to +85°C
Low Band				
Passband Insertion Loss	1710 - 1880	0.7 dB	0.9 dB max	1.0 dB max
Passband Return Loss	1710 - 1880	18.0 dB	16.0 dB min	16.0 dB min
Attenuation:	1920 - 2170	35.0 dB	30.0 dB min	30.0 dB min
High Band				
Passband Insertion Loss	1920 - 2170	0.7 dB	0.9 dB max	1.0 dB max
Passband Return Loss	1920 - 2170	18.0 dB	16.0 dB min	16.0 dB min
Attenuation:	1710 - 1880	35.0 dB	30.0 dB min	30.0 dB min
Average Power				20 Watt max
Peak Power				200 Watt max

Note: Supplier shall test each filter to the critical electrical specifications of the above table. Any subsequent audits may deviate from in value due to measurement repeatability among different test systems. Such deviations shall not exceed the following limits:

Specification Allowance

Insertion Loss 0.1 dB
Return Loss 1.0 dB
Stopbands 1.0 dB

\*This product is covered by one or more of the following U.S. and foreign patents including: US 4,692,726;US 4,742,562; US 4,800,348;US 4,829,274;US 5,146,193;EP 0573597;FR 0573597;FR 0573597;JP 508149/92;KR 142171;US 5,162,760;US 5,278,329;US 5,250,916;US 5,327,109;US 5,488,335;CA 2114029;FR 9306297;GB 2273393;JP 3205337;KR 115113;CN 93106228,4;US 5,512,866;EP 0706719;FR 0706719;FR 0706719;CB 0706719;CB

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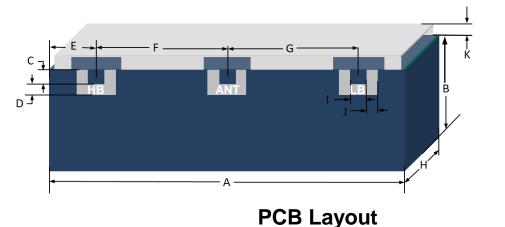
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### **Band 1/3 Diplexer**

## **Mechanical Drawing**

Preliminary Rev A – Origin Date: December 22, 2015



Dim	Nominal (mm)	Tolerance (mm) +/- or max
Α	85.00	Max
В	6.80	Max
Н	15.00	Max
K	2.00	0.13

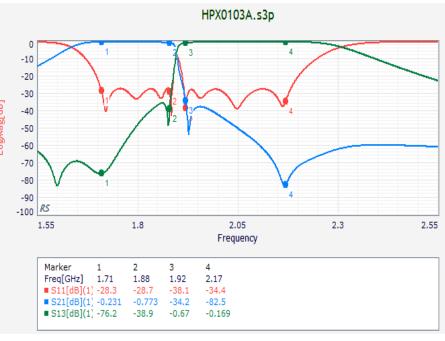
## **Packaging and Marking**

# Product is shipped in preformed 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**



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