

Features

- Low Loss
- Low Ripple
- High Rejection

Description

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

Weight: **TBD** 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

Parameter	Frequency (MHz)	Typical @ 25°C	Spec. @ 25°C	Spec. over -40°C to +85°C
Antenna to RX Response				
Passband Insertion Loss (Avg over 5 MHz)	1710-1755	0.8 dB	1.0 dB max	1.2 dB max
Passband Return Loss @ TX	1710-1755	15.0 dB	12.0 dB min	12.0 dB min
Attenuation:	2110-2155	65.0 dB	63.0 dB	63.0 dB
TX to Antenna Response				
Passband Insertion Loss (Avg over 5 MHz)	2110-2155	1.0 dB	1.2 dB max	1.4 dB max
Passband Return Loss @ ANT	2110-2155	15.0 dB	12.0 dB min	12.0 dB min
Attenuation:	1710-1755	65.0 dB	63.0 dB	63.0 dB
TX to RX Response				
Rejection @ RX	1710-1755	65.0 dB	63.0 dB	63.0 dB
Rejection @ TX	2110-2155	65.0 dB	63.0 dB	63.0 dB
Average Power		1.5 Watt max		
Peak Power		15 Watt max		
Nominal Impedance		50 Ohms		

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

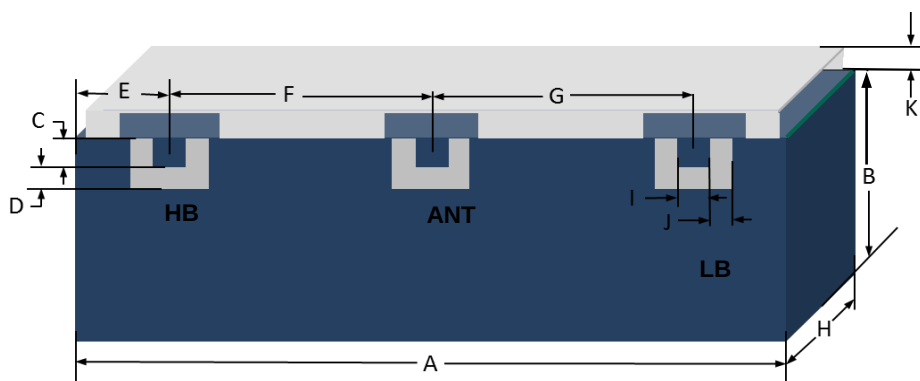
Insertion Loss	0.1 dB
Return Loss	1.0 dB
Stopbands	1.0 dB

*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;DE 0573597;FR 0573597;JP 508149/92;KR 142171;US 5,162,760;US 5,218,329;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;DE 0706719;FR 0706719;GB 0706719;CN 95190359.4;US 5,602,518;US 5,721,520;US 5,745,018;EP 0910875;DE 0910875;DK 0910875;FR 0910875;GB 0910875;IE 0910875;JP 505182/98;KR 10-323013;US 5,994,978;US 6,462,629;CN 00810420.4;US 6,559,735;US 6,650,202;US 6,834,429. Other US and foreign patents pending.

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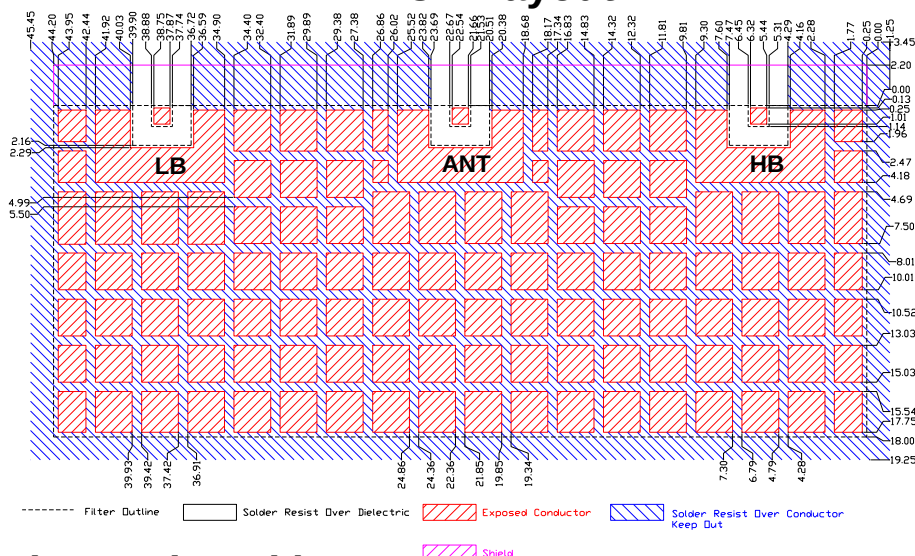
Mechanical Drawing

Preliminary Rev D – Origin Date: November 21, 2014 – Revision Date: May 13, 2015



Dim	Nominal (mm)	Tolerance (mm) +/- or max
A	39.75	0.25
B	8.25	0.20
C	1.10	0.13
D	1.00	0.13
E	3.66	0.13
F	16.22	0.13
G	16.22	0.13
H	7.96	0.20
I	1.00	0.13
J	1.00	0.13
K	1.70	0.20

PCB Layout



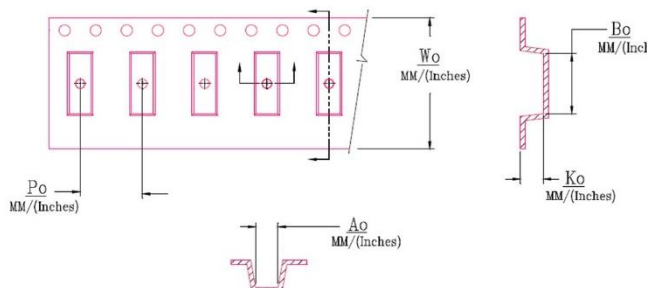
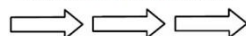
Packaging and Marking

Product Marking

DIMENSION	UNITS	SPECIFICATION
REEL DIAMETER	mm	330
REEL WEIGHT	kg	2.7
REEL QUANTITY	ea.	500

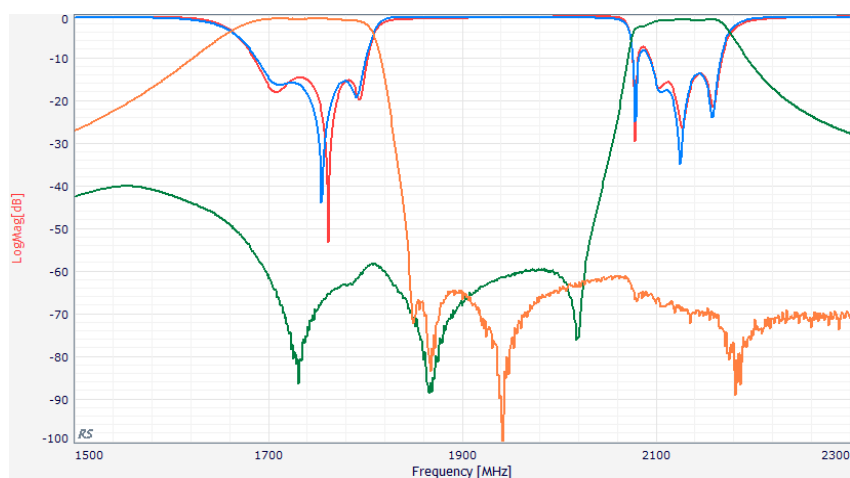
UPD
004
YWW

Customer Feed Direction



Wo	Ao	Bo	Ko	Po
Inches/mm	Inches/mm	Inches/mm	Inches/mm	Inches/mm
2.26/32.0	0.457/11.6	0.86/21.85	0.169/4.3	0.629/16.0

Electrical response



Electrical Specifications – Supplemental Spectrum Specifications

Parameter	Frequency (MHz)	Typical @ 25°C	Spec. @ 25°C	Spec. over -40°C to +85°C
Antenna to RX Response				
Attenuation:	1-960	60.0 dB	40.0 dB	40.0 dB
	960-1462.9	31.0 dB	20.0 dB	20.0 dB
	1462.9-1525	24.0 dB	15.0 dB	15.0 dB
	1525-1559	21.0 dB	10.0 dB	10.0 dB
	1844.9-1850	43.0 dB	30.0 dB	30.0 dB
	1850-2110	57.0 dB	40.0 dB	40.0 dB
	2110-2155	65.0 dB	63.0 dB	63.0 dB
	2155-2710	58.0 dB	40.0 dB	40.0 dB
	2710-3400	34.0 dB	25.0 dB	25.0 dB
	3400-3600	26.0 dB	15.0 dB	15.0 dB
	3600-3800	17.0 dB	10.0 dB	10.0 dB
TX to Antenna Response				
Attenuation:	1-1300	60.0 dB	35.0 dB	35.0 dB
	1300-1710	40.0 dB	30.0 dB	30.0 dB
	1710-1755	65.0 dB	63.0 dB	63.0 dB
	1755-2025	55.0 dB	35.0 dB	35.0 dB
	2200-2300	11.5 dB	10.0 dB	10.0 dB
	2300-2400	28.0 dB	20.0 dB	20.0 dB
	2400-2496	34.0 dB	25.0 dB	25.0 dB
	2496-2690	37.0 dB	31.0 dB	31.0 dB
	2690-3400	42.0 dB	31.0 dB	31.0 dB
	3400-3800	27.0 dB	22.0dB	22.0dB
	3800-4400	15.0 dB	10.0dB	10.0dB