

Features

- Low Loss
- Low Ripple
- High Rejection

Description

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

Weight: **9.7 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)	1850-1910	2.7 dB	2.8 dB max	3.0 dB max
Passband Return Loss @ TX	1850-1910	15.0 dB	12.0 dB min	12.0 dB min
Attenuation:	1930-1990	58.0 dB	55.0 dB	55.0 dB
TX to Antenna Response				
Passband Insertion Loss (Avg over 5 MHz)	1930-1990	2.7 dB	2.8 dB max	3.0 dB max
Passband Return Loss @ ANT	1930-1990	15.0 dB	12.0 dB min	12.0 dB min
Attenuation:	1850-1910	61.5 dB	60.0 dB	60.0 dB
TX to RX Response				
Rejection @ RX	1850-1910	62.5 dB	61.0 dB	61.0 dB
Rejection @ TX	1930-1990	58.0 dB	55.0 dB	55.0 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:

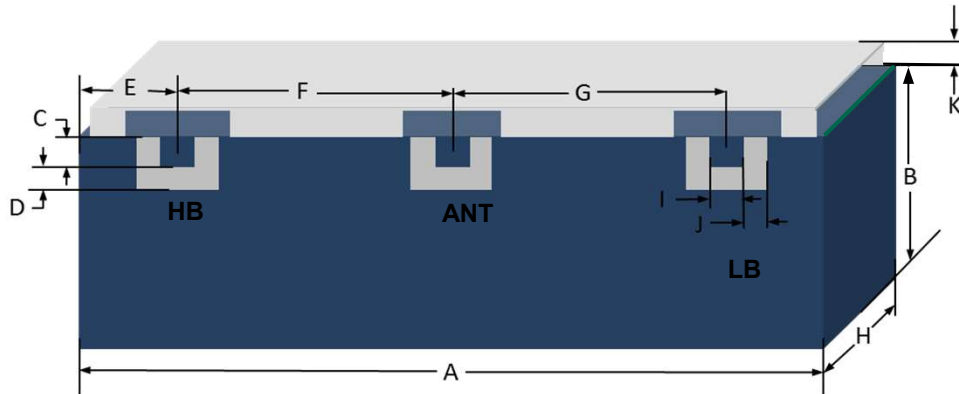
Specification Allowance	
Insertion Loss	0.1 dB
Return Loss	1.0 dB
Stopbands	1.0 dB

*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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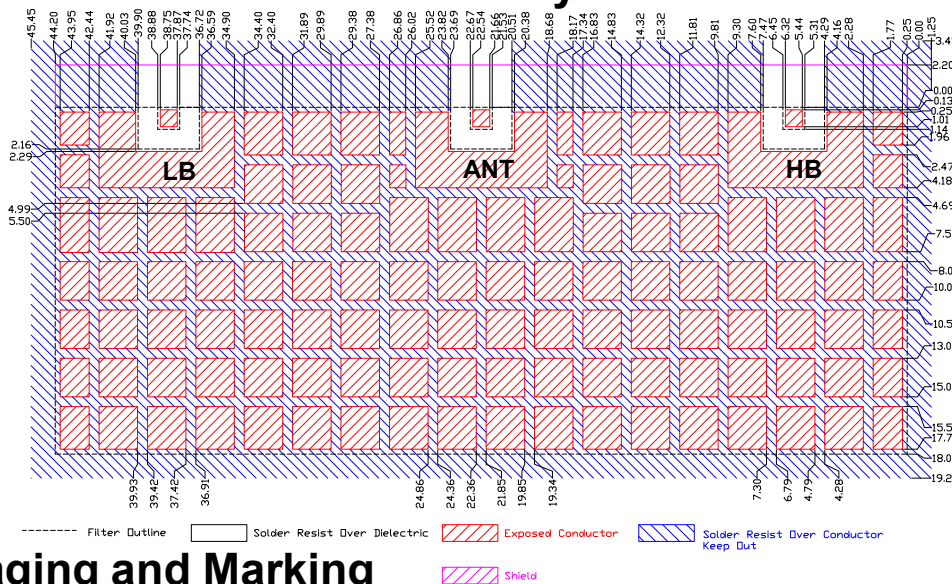
Mechanical Drawing

Preliminary Rev A – Origin Date: February 21, 2014 – Revision Date: February 21, 2016

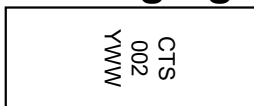


Dim	Nominal (mm)	Tolerance (mm) +/- or max
A	44.00	0.30
B	8.00	0.30
C	1.10	0.13
D	1.00	0.13
E	5.78	0.13
F	16.22	0.13
G	16.22	0.13
H	8.30	0.20
I	1.00	0.13
J	1.00	0.13
K	1.80	0.20

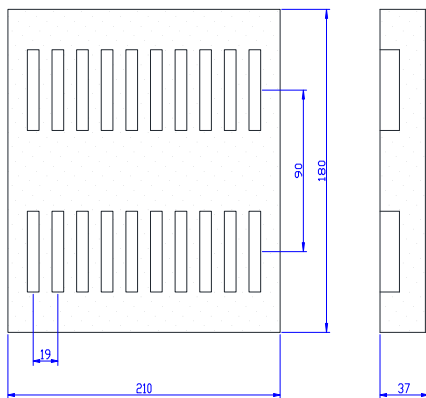
PCB Layout



Packaging and Marking

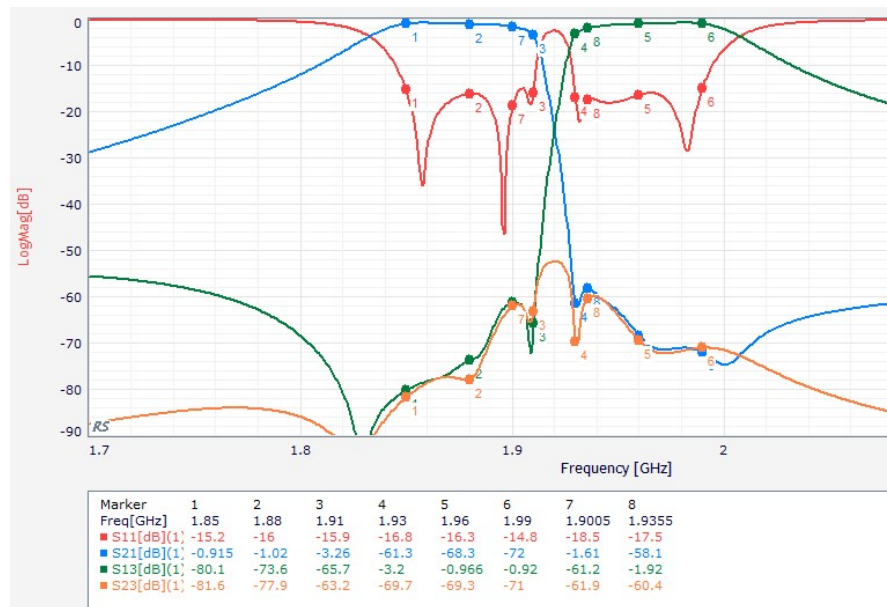


Product is shipped in preformed foam trays



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



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	39.0 dB	25.0 dB	25.0 dB
	1462.9-1525	35.0 dB	20.0 dB	20.0 dB
	1525-1559	32.0 dB	20.0 dB	20.0 dB
	1559-1710	20.0 dB	10.0 dB	10.0 dB
	1710-1780	8.0 dB	5.0 dB	5.0 dB
	1930-1990	57.0 dB	55.0 dB	55.0 dB
	1990-2710	60.0 dB	40.0 dB	40.0 dB
	2710-3600	47.0 dB	37.0 dB	37.0 dB
	3600-3800	33.0 dB	25.0 dB	25.0 dB
TX to Antenna Response				
Attenuation:	1-1850	50.0 dB	40.0 dB	40.0 dB
	1850-1910	61.5 dB	60.0 dB	60.0 dB
	1910-1915	35.0 dB	20.0 dB	20.0 dB
	1915-1920	15.0 dB	7.0 dB	7.0 dB
	2110-2200	19.0 dB	10.0 dB	10.0 dB
	2200-2300	25.0 dB	15.0 dB	15.0 dB
	2300-3800	31.5 dB	32.0 dB	32.0 dB
	3800-4000	29.0 dB	22.0 dB	22.0 dB