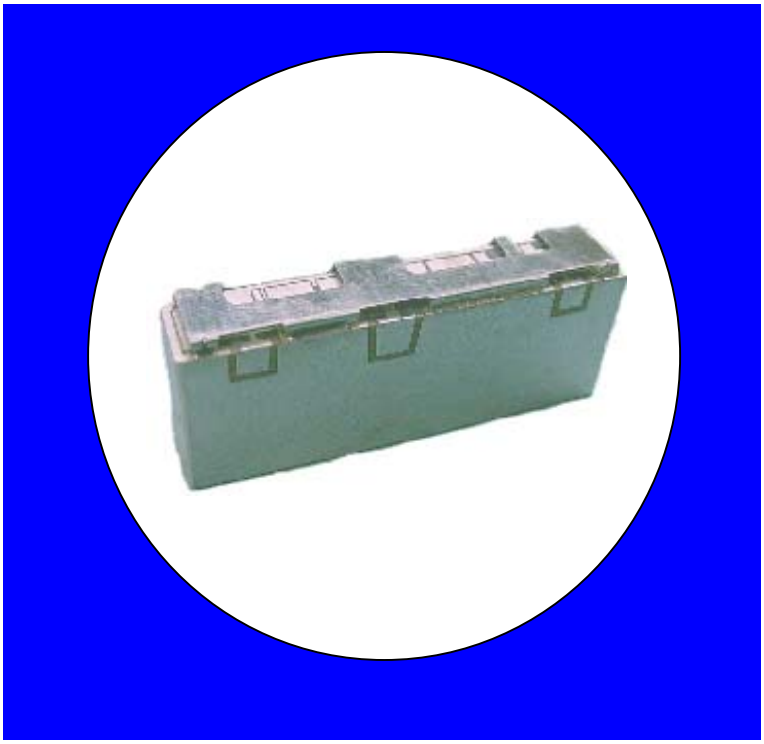
CER0207A

800 MHZ Duplexer

Rev 3 – Origin Date: July 11, 2005 – Revision Date: March 3, 2006

Features

- Low Insertion Loss
- Low Ripple
- Excellent Rejection and Isolation



Description

Surface mount, silver (Ag) coated ceramic duplexer. Developed for use in 800 MHz Infrastructure Applications.

Weight: 12.25 grams typical

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

Filter complies with RoHS standards.

Electrical Specifications

Parameter	Frequency (MHz)	Typical @ 25ºC	Spec. @ 25ºC	Spec. over -40ºC to +85ºC
TX to Antenna Response				
Passband Insertion Loss	824 - 849	1.5 dB	1.8 dB max	2.0 dB max
Passband Ripple	824 - 849	1.0 dB	1.4 dB max	1.5 dB max
Passband Return Loss @ TX	824 - 849	14.3 dB	12 dB min	12 dB min
Passband Return Loss @ ANT	824 - 849	13.4 dB	12 dB min	12 dB min
Attenuation:	869 - 894	47.9 dB	44 dB min	44 dB min
	1648 - 1698	25.0 dB	18 dB min	18 dB min
Antenna to RX Response				
Passband Insertion Loss	869 - 894	2.2 dB	2.6 dB max	3.0 dB max
Passband Ripple	869 - 894	1.0 dB	1.5 dB max	1.8 dB max
Passband Return Loss @ RX	869 - 894	13.6 dB	11 dB min	11 dB min
Passband Return Loss @ ANT	869 - 894	14.2 dB	11 dB min	11 dB min
Attenuation:	824 - 849	64.9 dB	55 dB min	55 dB min
	1648 - 1698	25.0 dB	18 dB min	18 dB min
TX to RX Response				
Rejection	859	50.0 dB	45 dB min	45 dB min
Rejection @ TX band	824 - 849	66.8 dB	58 dB min	58 dB min
Rejection @ RX band	869 - 894	51.5 dB	45 dB min	45 dB min
Power into Any port		6 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;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.

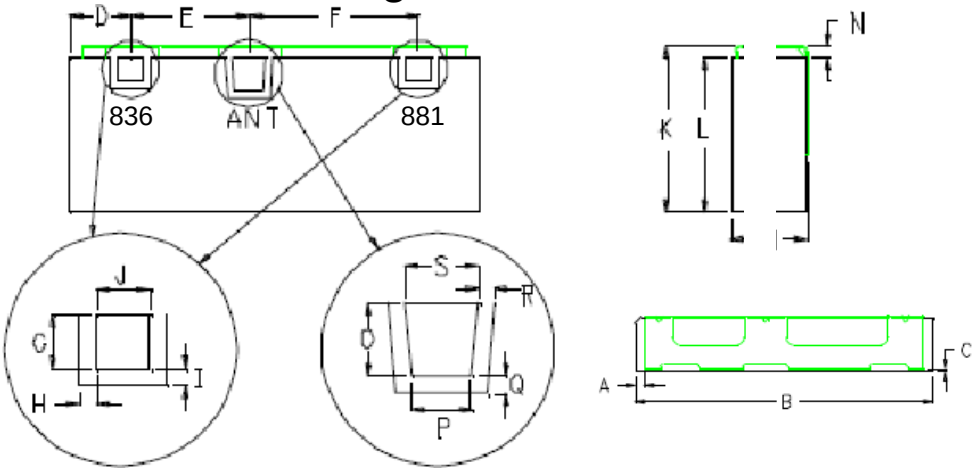
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800 MHZ Duplexer

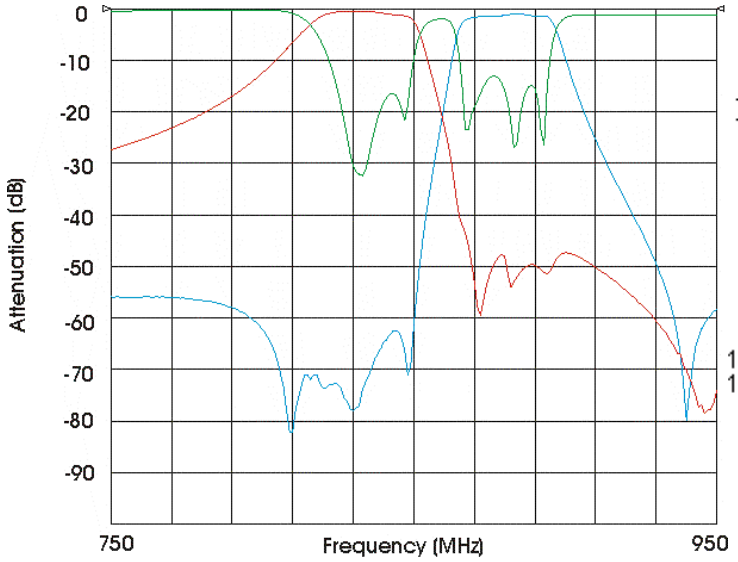
Rev 2 – Origin Date: July 11, 2005 – Revision Date: December 6, 2005

Mechanical Drawing

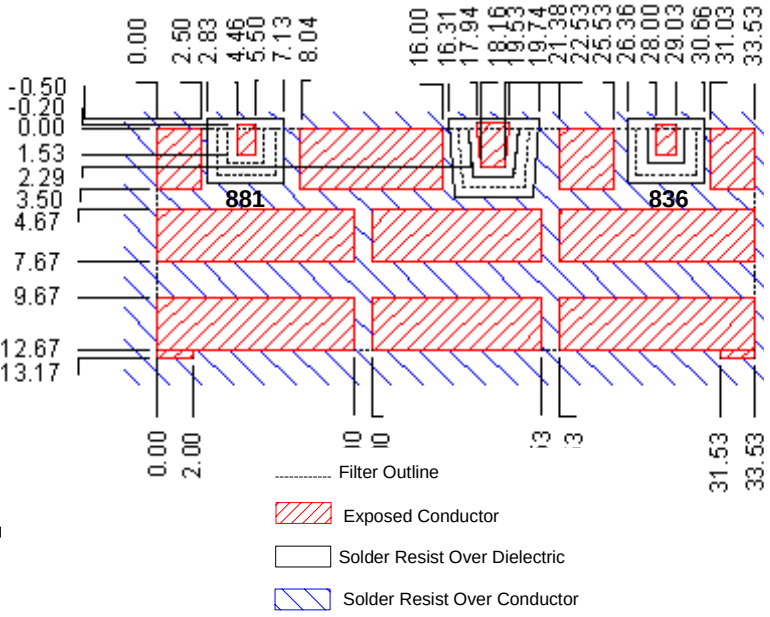


Dim	Nominal (mm)	Tolerance (mm) +/- or max
A		
B	33.80	max
C		
D	5.02	0.25
E	9.67	0.13
F	13.86	0.13
G	2.03	0.13
H	0.64	0.13
I	0.64	0.13
J	2.03	0.13
K	13.70	max
L	12.67	max
M	6.50	max
N	0.89	0.13
O	2.79	0.13
P	2.29	0.13
Q	0.64	0.13
R	0.55	0.13
S	2.79	0.13

Electrical Response

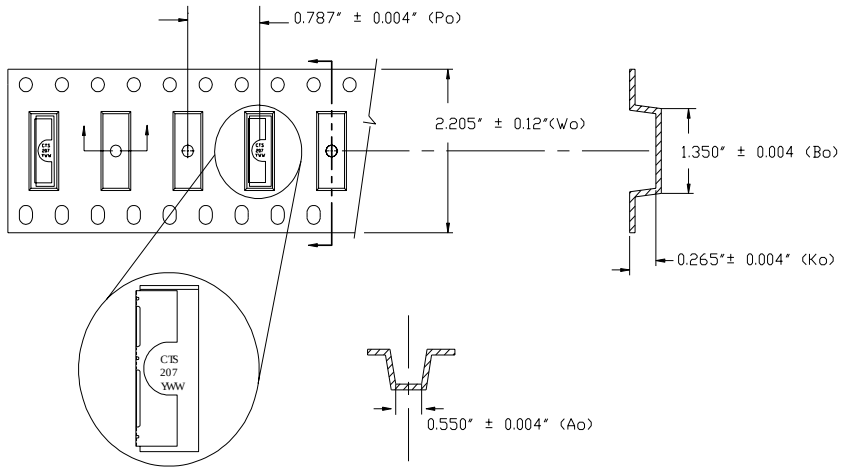


PCB Layout



Packaging and Marking

DIMENSION	UNITS	SPECIFICATION
REEL DIAMETER	mm	330
REEL WEIGHT	kg	3.8
REEL QUANTITY	ea.	250



Customer Feed Direction