

### Features

- Low Loss
- Low Ripple
- High Rejection

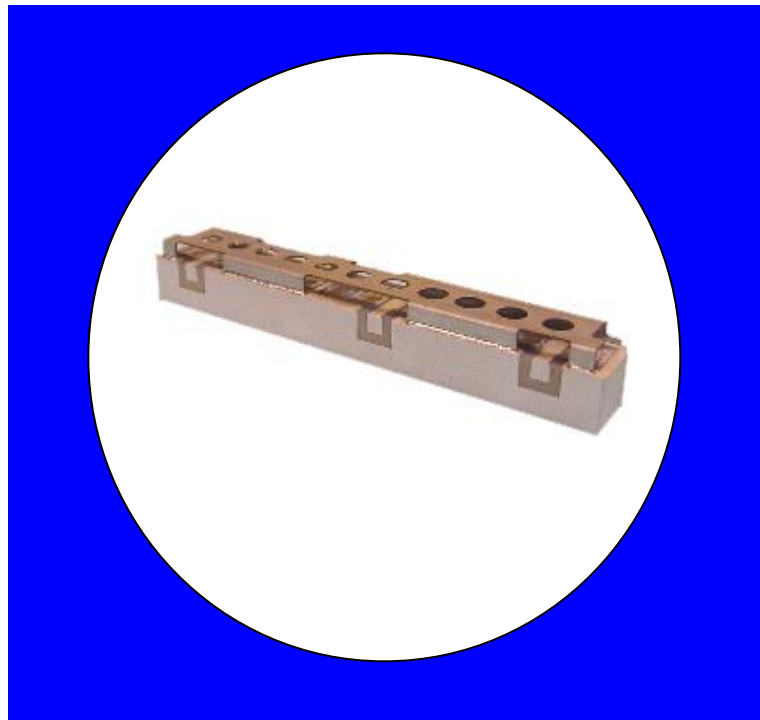
### Description

Surface mount, silver (Ag) coated ceramic diplexer. Developed for use in GPS applications.

Weight: 20.5 grams typical

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

Filter complies with RoHS standards.



### Electrical Specifications

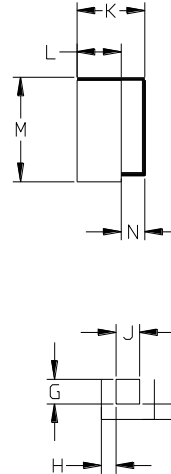
Parameter	Frequency (MHz)	Typical @ 25°C	Spec. @ 25°C	Spec. over -40°C to +55°C
<b>TX to Antenna Response</b>				
Passband Insertion Loss	1525-1615	1.0 dB	1.1 dB max	1.2 dB max
	1565-1586	0.8 dB	0.9 dB max	1.0 dB max
Passband Ripple	1525-1615	0.4 dB	0.5 dB max	0.6 dB max
	1565-1586	0.35 dB	0.4 dB max	0.5 dB max
Passband Return Loss @ TX	1525-1615	15 dB	12.0 dB min	12.0 dB min
Attenuation:	1166-1300	61 dB	60.0 dB min	60.0 dB min
	1410	50 dB	45.0 dB min	45.0 dB min
	1468	25 B	23.0 dB min	23.0 dB min
	1675	20 dB	18.0 dB min	18.0 dB min
	1735	48 dB	45.0 dB min	45.0 dB min
<b>Antenna to RX Response</b>				
Passband Insertion Loss	1166-1300	1.0 dB	1.1 dB max	1.2 dB max
Passband Ripple	1166-1300	0.4 dB	0.5 dB max	0.6 dB max
Passband Return Loss @ ANT	1166-1300	15 dB	12.0 dB min	12.0 dB min
Attenuation:	1525-1615	56 dB	55.0 dB min	55.0 dB min
	1080	38 dB	33.0 dB min	33.0 dB min
	1123	18 dB	15.0 dB min	15.0 dB min
	1342	15 dB	13.0 dB min	13.0 dB min
	1385	50 dB	25.0 dB min	25.0 dB min
<b>Power into any port</b>		5W average / 60W peak		

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

Rev C – Origin Date: August 20, 2019 – Revision Date: January 16, 2023



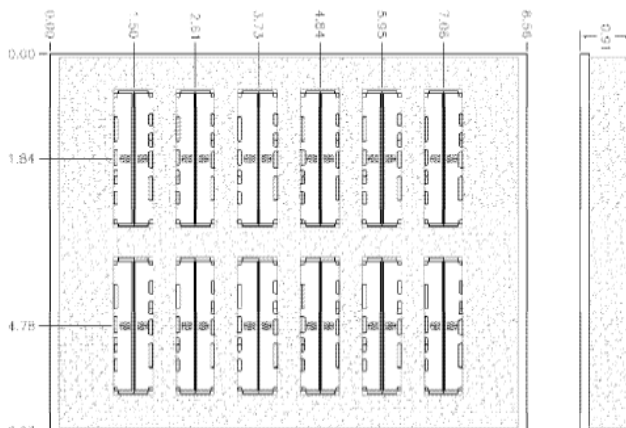
Dim	Nominal (mm)	Tolerance (mm) +/- or max
A		
B	60.8	max
C		
D	6.43	0.25
E	27.82	0.13
F	19.49	0.13
G	2.03	0.13
H	1.27	0.13
I	1.27	0.13
J	2.03	0.13
K	8.9	max
L	6.5	max
M	10.59	max
N	2.29	0.13

- - - - - Filter Outline  
 Exposed Conductor  
 Solder Resist Over Dielectric  
 Solder Resist Over Conductor

Recommended solder: 6 mils of SAC305 with reflow incl. 120s of soak at 217°C, and up to 30 sec peak at 241°C.

CTS  
80F  
YWW

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.

Marker	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Freq[MHz]	1080	1123	1166	1227	1233	1300	1342	1385	1410	1468	1526	1565	1575	1596	1635	1675	1735
S1[ε <sub>1</sub> ]1	-0.353	-0.457	-13	-23.1	-25.9	-14.9	-0.527	-0.466	-0.466	-0.486	-10.5	-22.7	-24.4	-23.7	-12.7	-0.47	-0.473
S2[ε <sub>2</sub> ]1	-63.8	-62.5	-66.6	-60	-68.5	-67.7	-63.1	-60.1	-59.4	-68.9	-0.932	-0.684	-0.763	-0.675	-0.894	-27.2	-47.3
S3[ε <sub>3</sub> ]1	-43.1	-21.9	-0.92	-0.85	-0.628	-0.968	-23.4	-64.7	-60.2	-88.9	-70.3	-75.5	-77.7	-80.4	-84.9	-67.8	-65