

### Features

- Extended pass band
- Low loss
- High rejection

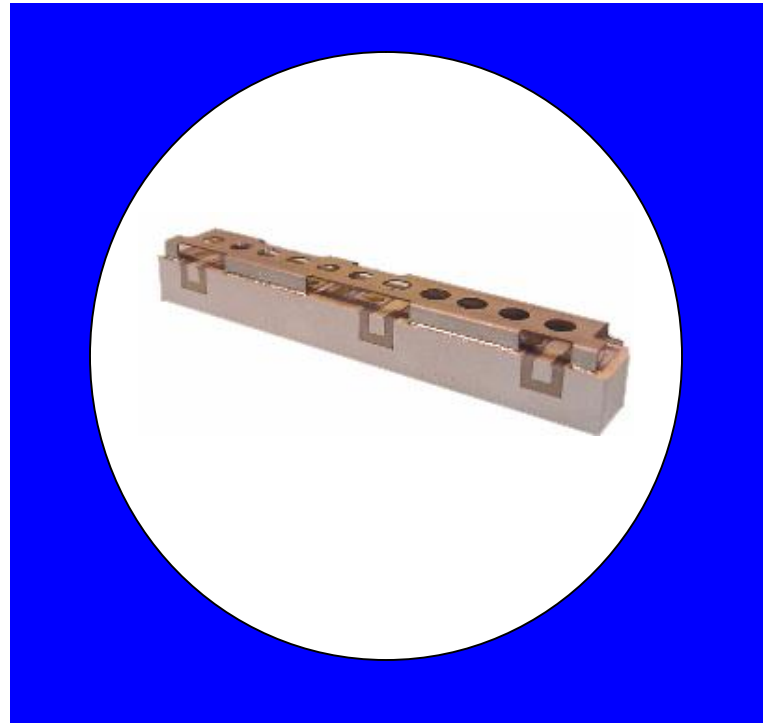
### Description

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

Weight: Approximately 30.0 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	Specification @ 25°C	Spec over 40°C to +85°C
<b>Low Band Response (S21)</b>				
Passband Iloss	1710 - 1755	-1.70	-2.05	-2.20
Passband Ripple	1710 - 1755	1.00	1.40	1.50
Passband Return Loss @ Port 2	1710 - 1755	-15.00	-13.00	-13.00
Passband Return Loss @ Ant	1710 - 1755	-15.00	-13.00	-13.00
Attenuation	1805 - 1850	-64.00	-61.00	-60.00
	1780	-23.00	-21.00	-20.00
<b>High Band Response (S13)</b>				
Passband Iloss	1805 - 1850	-1.70	-2.05	-2.20
Passband Ripple	1805 - 1850	1.00	1.40	1.50
Passband Return Loss @ Port 3	1805 - 1850	-15.00	-13.00	-13.00
Passband Return Loss @ Ant	1805 - 1850	-15.00	-13.00	-13.00
Attenuation	1710 - 1755	-64.00	-61.00	-60.00
	1780	-28.00	-26.00	-25.00
<b>Isolation (S23)</b>				
Rejection @ Low Band	1710 - 1755	-65.00	-62.00	-61.00
Rejection @ High Band	1805 - 1850	-65.00	-62.00	-61.00
Max Power into any port		10 Watt		

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:

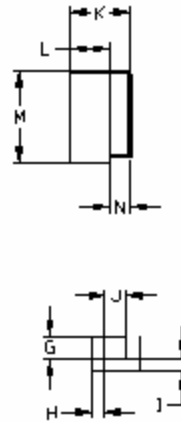
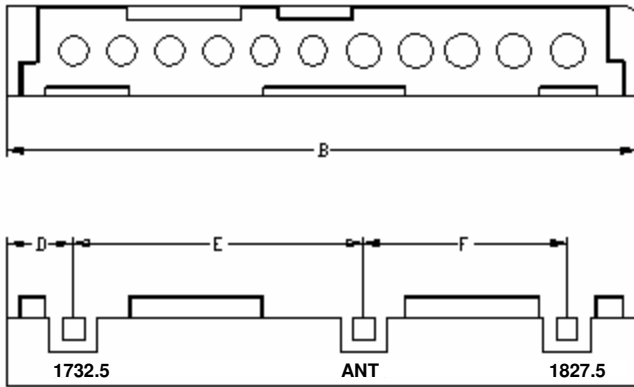
Specification Allowance	
Insertion Loss	0.1 dB
Return Loss	1.0 dB
Stopbands	1.0 dB

\*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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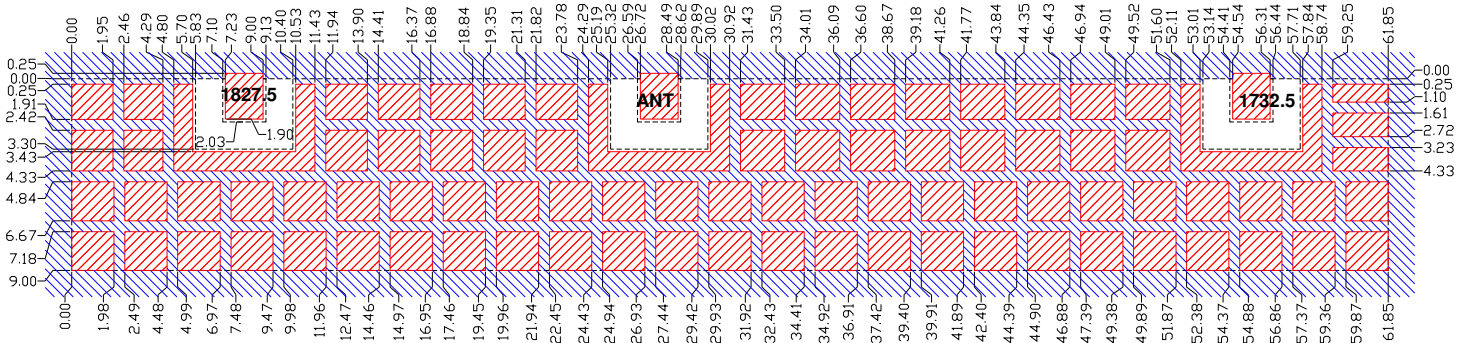
### Mechanical Drawing

Revision C – Origin Date: October 29, 2009 – Revision Date: July 27, 2011



Dim	Nominal (mm)	Tolerance (mm) +/- or max
A		
B	60.85	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	11.2	max
L	9.0	Max
M	8.0	max
N	2.2	0.13

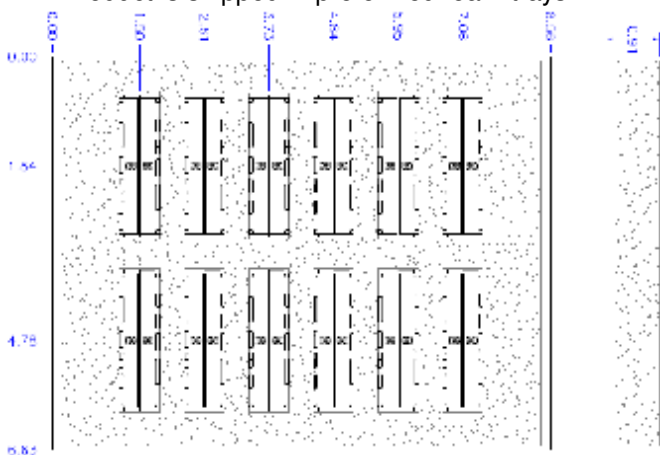
### PCB Layout



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

### Packaging and Marking

Product is shipped in preformed foam trays



5 Trays containing 12 slots with 2 filters per slot. 5 Trays per box. Total 120 filters per box

Part Marking: CTS 613 YWW

### Electrical response

