# imall

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



# Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832 Email & Skype: info@chipsmall.com Web: www.chipsmall.com Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China





## CER0254B 815/860 MHz Duplexer

Rev 3 - Origin Date: August 30, 2005 - Revision Date: March 3, 2006

#### **Features**

High Rejection

Low Loss

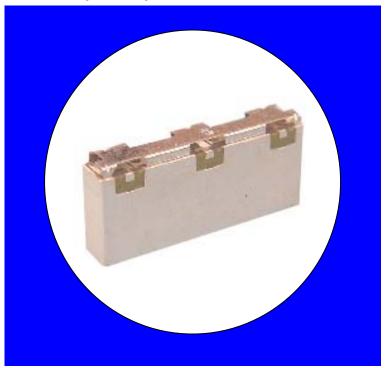
#### Description

Surface mount, silver (Ag) coated neodymium ceramic duplexer.

Weight: 3.9 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**

|                            | Frequency |                |              | Spec40°C to |
|----------------------------|-----------|----------------|--------------|-------------|
| Parameter                  | (MHz)     | Typical @ 25ºC | Spec. @ 25ºC | +85ºC       |
| Low Band Response          |           |                |              |             |
| Passband Insertion Loss    | 806 - 824 | 2.4 dB         | 2.8 dB max   | 3.0 dB max  |
| Passband Return Loss @ TX  | 806 - 824 | 13.5 dB        | 10.0 dB min  | 10.0 dB min |
| Passband Return Loss @ ANT | 806 - 824 | 13.5 dB        | 10.0 dB min  | 10.0 dB min |
| Attenuation:               | 851 - 869 | 53 dB          | 50.0 dB min  | 50.0 dB min |
| High Band Response         |           |                |              |             |
| Passband Insertion Loss    | 851 - 869 | 2.5 dB         | 2.8 dB max   | 3.0 dB max  |
| Passband Return Loss @ RX  | 851 - 869 | 13.5 dB        | 10.0 dB min  | 10.0 dB min |
| Passband Return Loss @ ANT | 851 - 869 | 13.5 dB        | 10.0 dB min  | 10.0 dB min |
| Attenuation:               | 806 - 824 | 48 dB          | 45.0 dB min  | 45.0 dB min |
|                            | 896 - 941 | 28.0 dB        | 25.0 dB min  | 25.0 dB min |
| TX _ RX Response           |           |                |              |             |
| Isolation at Low Band      | 806 - 824 | 50 dB          | 48.0 dB min  | 48.0 dB min |
| Isolation at High Band     | 851 - 869 | 54 dB          | 52.0 dB min  | 52.0 dB min |
| Power into any port        |           |                | 3 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;JP 05

•CTS Corporation 2006 reserves all copyrights in the layout, design and configuration of the patterns on this product."

Page 1 of 2



# **CER0254B** 815/860 MHz Duplexer

Tolerance (mm)

+/- or max

max

0.20

0.20

0.20

0.13

0.13

0.13

0.13

0.30

0.20

max

0.13

#### Rev 2 - Origin Date: August 30, 2005 - Revision Date: January 11, 2006

Nominal (mm)

21.54

2.72

7.95

7.95

0.76

1.00

1.00

0.76

9.80

8.90

4.00

0.80

Dim

Α В

С D

Ε

F

G

н

I

J

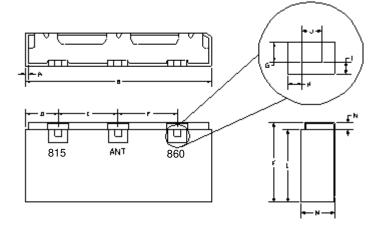
κ

L

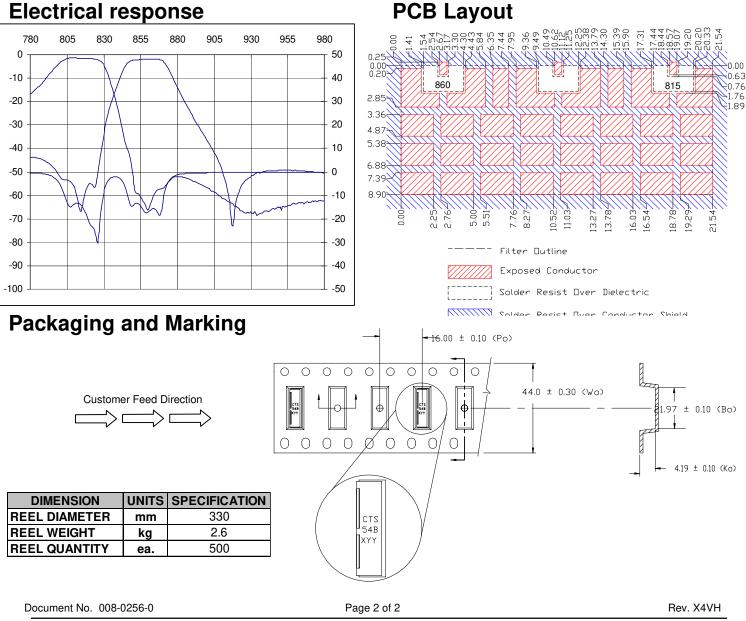
М

\*N

## **Mechanical Drawing**



### **Electrical response**



- CTS Electronic Components - www.ctscorp.com - 171 Covington Drive - Bloomingdale, IL 60108 -