



**M/A-COM**

**FR42-Series**

## Small Profile Drop-In Isolator



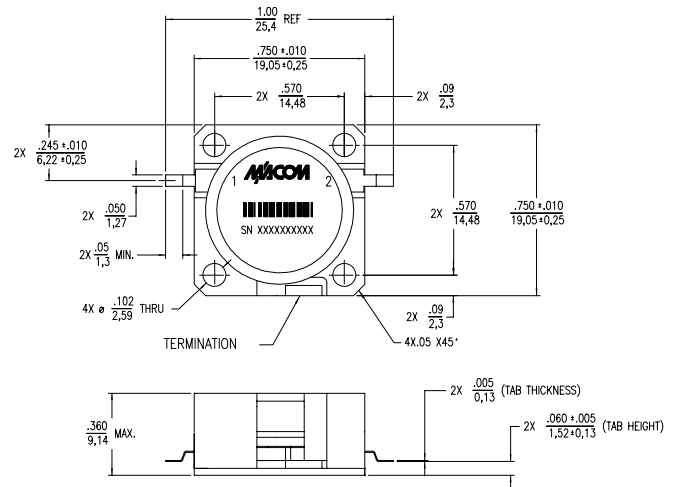
### Features

- 24 dB Isolation Typical, 0.25 dB Insertion Loss Typical
- Custom Products Available with Alternate Configurations such as Couplers, Attenuators, Higher Power Terminations, Reverse Circulation and Termination on Ports 1 or 2
- Available as Custom Product Without Flange for Surface Mount Applications (Solder Reflow)
- Designed for Wireless Telecommunications Systems: AMPS, N-AMPS, D-AMPS

### Description

M/A-COM's drop-in circulators and isolators, designed for cellular applications, feature high performance at low cost. These designs offer the best isolation per insertion loss ratio in the industry and are currently produced in the tens of thousands of pieces per year. These units can be ordered so as to be compatible with solder reflow manufacturing techniques. Both circulators and isolators are in stock at all authorized M/A-COM distributors.

### FR42



| Part Number | Frequency Range (MHz) |
|-------------|-----------------------|
| FR42-0001   | 869 – 894             |
| FR42-0002   | 925 – 960             |
| FR42-0003   | 1805 – 1880           |
| FR42-0004   | 1930 – 1990           |
| FR42-0005   | 824 – 849             |
| FR42-0006   | 880 – 915             |
| FR42-0007   | 1710 – 1785           |
| FR42-0008   | 1850 – 1910           |

### Electrical Specifications

| Parameter       | Units | -10 to +60° C |      |      | -30 to +85° C |      |      |
|-----------------|-------|---------------|------|------|---------------|------|------|
|                 |       | Min.          | Typ. | Max. | Min.          | Typ. | Max. |
| Isolation       | dB    | 22            | 24   | —    | 20            | 22   | —    |
| Insertion Loss  | dB    | —             | 0.25 | 0.3  | —             | 0.30 | 0.35 |
| Forward Power   | Watts | —             | —    | 65   | —             | —    | 65   |
| Reflected Power | Watts | —             | —    | 30   | —             | —    | 36   |
| VSWR            | —     | —             | —    | 1.20 | —             | —    | 1.22 |

V2.00

M/A-COM Division of AMP Incorporated ■ North America: Tel. (800) 366-2266, Fax (800) 618-8883 ■ Asia/Pacific: Tel. +85 2 2111 8088, Fax +85 2 2111 8087  
 ■ Europe: Tel. +44 (1344) 869 595, Fax +44 (1344) 300 020

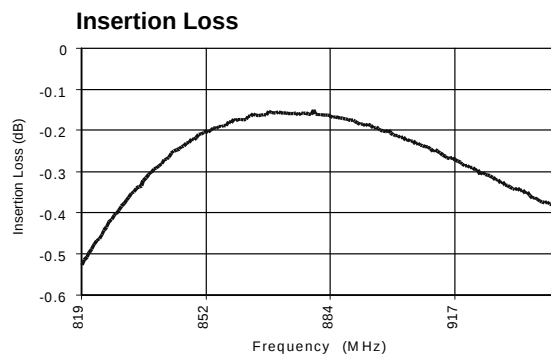
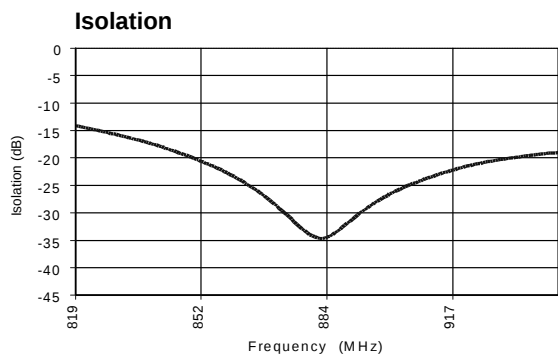
[www.macom.com](http://www.macom.com)

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 Specifications subject to change without notice.

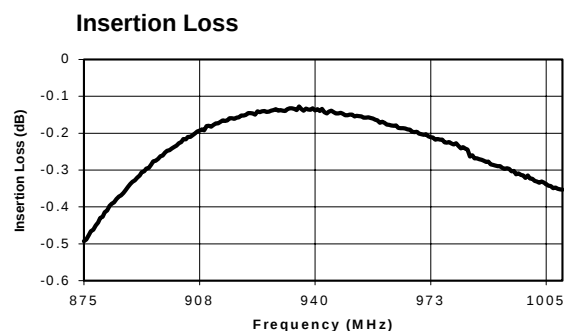
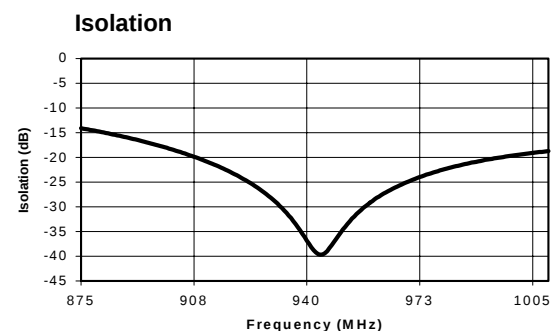


## Typical Performance, T = +25°C

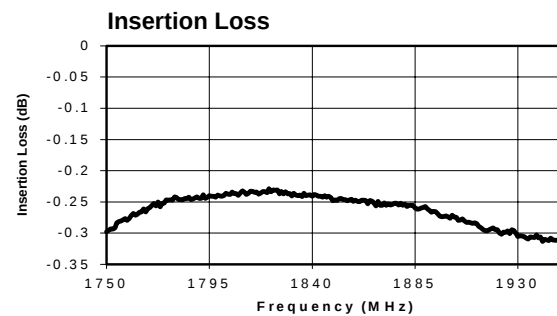
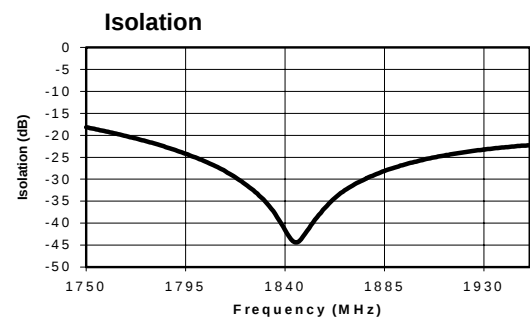
## FR42-0001



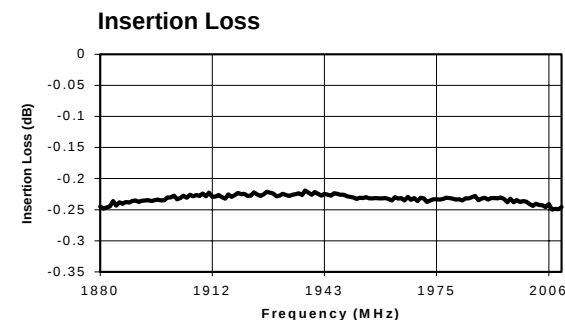
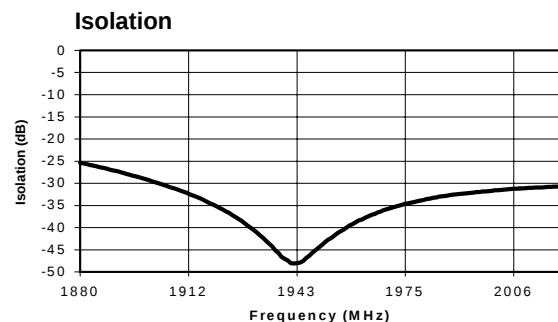
## FR42-0002



## FR42-0003



## FR42-0004



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