

# **DW9268**

## 240.192MHz IF SAW Filter

**Advance Information** 

DS4025 - 1.4 October 1995

The DW9268 has been designed specifically for the Digital Cordless Personal Communications market as an IF filter with a centre frequency of 240.192MHz. The filter utilises GPS's low loss (7dB typical), Transversal filter technology based on a Quartz substrate for excellent temperature stability.

A 3dB passband of 1.3MHz (typical) is maintained whilst providing rejection to adjacent and alternate interferers compliant to the DECT Common Interface specification Part 2 - The Physical Layer. The device also exhibits excellent close-in and ultimate rejection, which combined with a Group Delay Ripple of 200ns maximum makes the DW9268 and ideal IF filter for Digital Cordless Personal Communications systems.

The device is packaged in a surface mount, leadless ceramic chip carrier, suited to high volume automated assembly systems.

### **FEATURES**

- 240.192MHz Centre Frequency (fo)
- Low Insertion Loss (8dB maximum)
- 3dB Passband 1.3MHz (typical)
- Quartz Temperature Stability
- Low Profile Ceramic LCC Package

## **ABSOLUTE MAXIMUM RATINGS**

DC Voltage VDC 0V Input Power Max. PIN 10dBm

## **NOMINAL IMPEDANCE**

Input: 500 // 16pF Output: 625 // 14pF

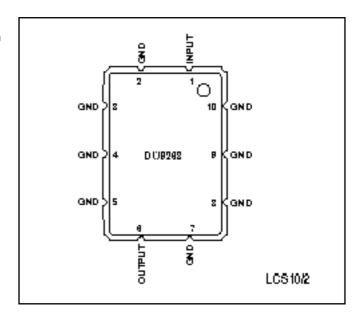
#### 50 TEST BOARD COMPONENTS

Input: Shunt Cap. 45pF, Series Ind. 47nH Output: Series Ind. 47nH, Shunt Cap. 34pF

Components: Coilcraft 1008CS Inductors: Murata 0805 Capacitors

## **ORDERING INFORMATION**

DW9268

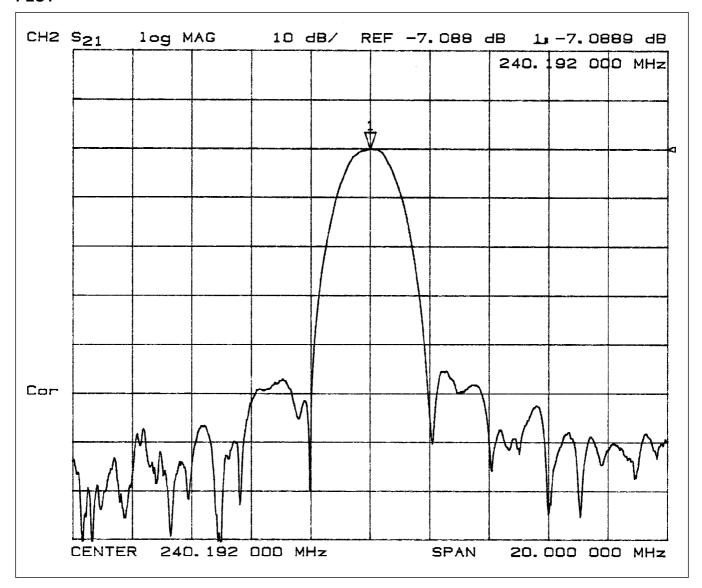


**ELECTRICAL CHARACTERISTICS** @ 25°C

DW9268

| Parameter   | Min                         | Тур                  | Max                     | Units                |
|---|-----------------------------|----------------------|-------------------------|----------------------|
| Centre Frequency  | -                           | 240.192              | -                       | MHz                  |
| 3dB Bandwidth   | 1260                        | 1300                 | 1340                    | kHz                  |
| Insertion Loss  | -                           | 7                    | 8                       | dB                   |
| Amplitude Ripple  | -                           | 0.2                  | 1                       | dB                   |
| Group Delay Ripple  | -                           | 100                  | 200                     | ns                   |
| Stopband Rejection fo ± 1.152 MHz fo ± 1.728 MHz fo ± 2.880 MHz fo ± 5.0 MHz  Operating Temperature Range | 10<br>30<br>40<br>50<br>-20 | 12<br>32<br>50<br>55 | -<br>-<br>-<br>-<br>+80 | dB<br>dB<br>dB<br>dB |

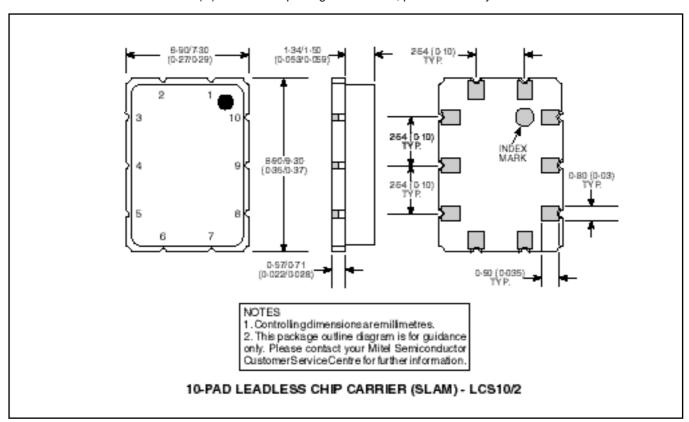
# **PLOT**



#### DW9268

#### **PACKAGE DETAILS**

Dimensions are shown thus: mm (in). For further package information, please contact your local Customer Service Centre.





## **HEADQUARTERS OPERATIONS**

### MITEL SEMICONDUCTOR

Cheney Manor, Swindon, Wiltshire SN2 2QW. United Kingdom. Tel: (01793) 518000

Fax: (01793) 518411

## MITEL SEMICONDUCTOR

1500 Green Hills Road, Scotts Valley, California 95066-4922 United States of America. Tel (408) 438 2900 Fax: (408) 438 5576/6231

# Internet: http://www.gpsemi.com

CUSTOMER SERVICE CENTRES

- FRANCE & BENELUX Les Ulis Cedex Tel: (1) 69 18 90 00 Fax: (1) 64 46 06 07
- GERMANY Munich Tel: (089) 419508-20 Fax: (089) 419508-55
- ITALY Milan Tel: (02) 6607151 Fax: (02) 66040993
- JAPAN Tokyo Tel: (03) 5276-5501 Fax: (03) 5276-5510
- **KOREA** Seoul Tel: (2) 5668141 Fax: (2) 5697933
- NORTH AMERICA Scotts Valley, USA Tel: (408) 438 2900 Fax: (408) 438 5576/6231
- **SOUTH EAST ASIA** Singapore Tel:(65) 3827708 Fax: (65) 3828872
- **SWEDEN** Stockholm Tel: 46 8 702 97 70 Fax: 46 8 640 47 36
- TAIWAN, ROC Taipei Tel: 886 2 25461260 Fax: 886 2 27190260
- **UK, EIRE, DENMARK, FINLAND & NORWAY**

Swindon Tel: (01793) 726666 Fax: (01793) 518582

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