

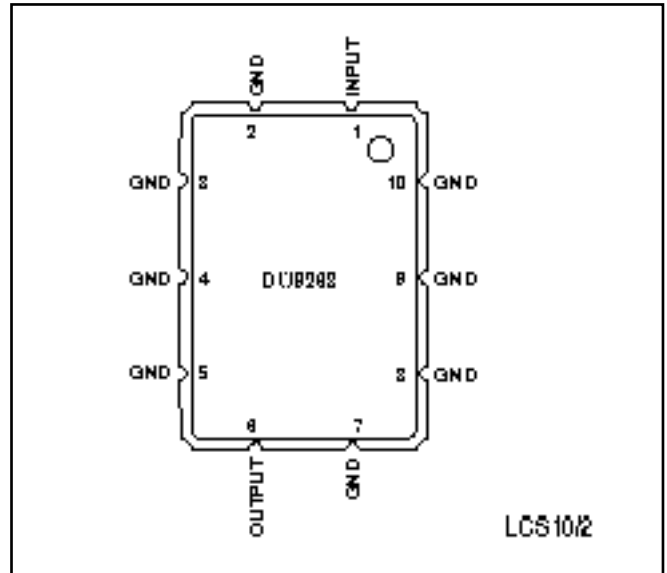
The DW9268 has been designed specifically for the Digital Cordless Personal Communications market as an IF filter with a centre frequency of 240.192MHz. The filter utilises GPS's low loss (7dB typical), Transversal filter technology based on a Quartz substrate for excellent temperature stability.

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 an 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**

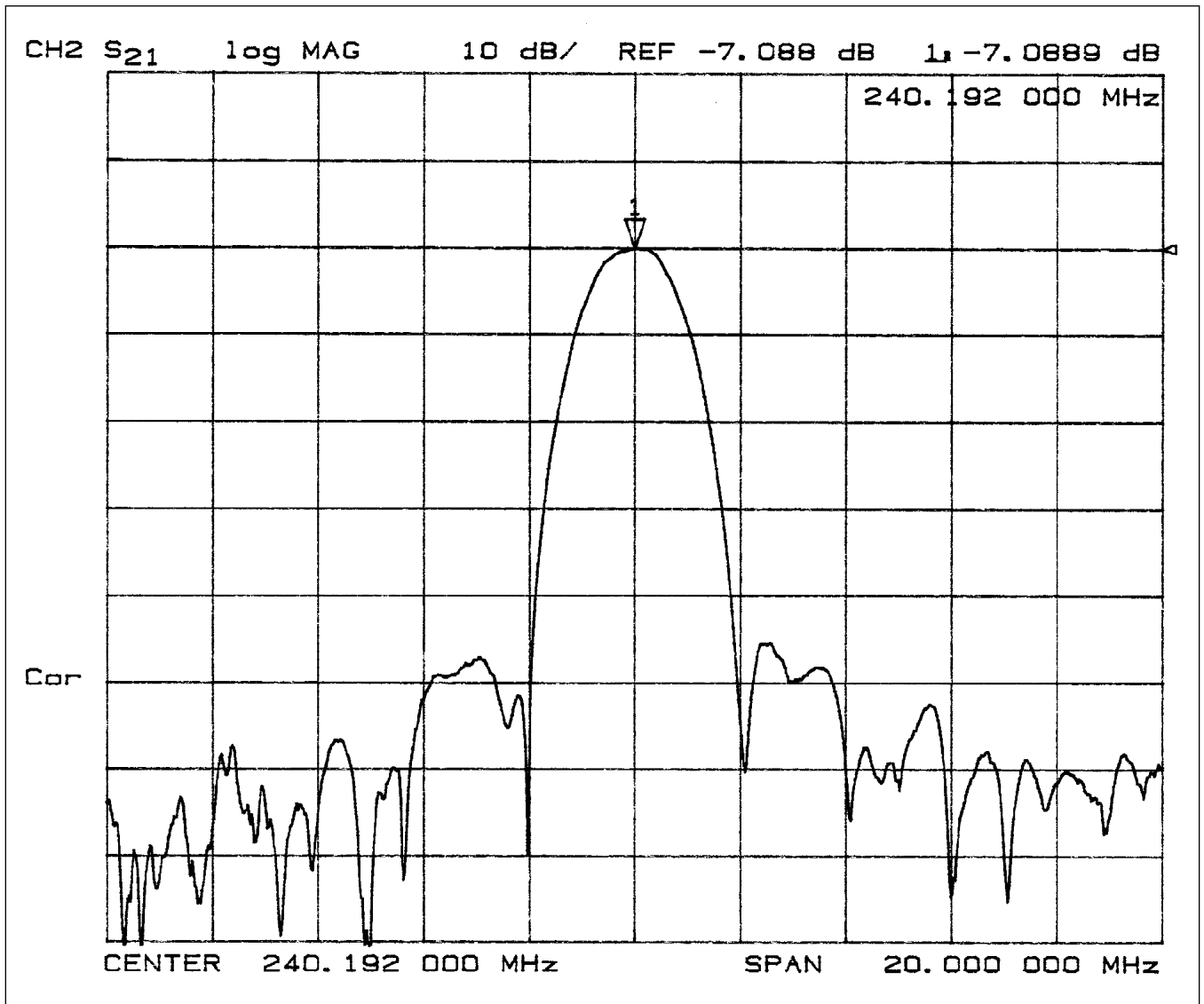
DW9268

## DW9268

### ELECTRICAL CHARACTERISTICS @ 25°C

Parameter	Min	Typ	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	10	12	-	dB
fo ± 1.728 MHz	30	32	-	dB
fo ± 2.880 MHz	40	50	-	dB
fo ± 5.0 MHz	50	55	-	dB
Operating Temperature Range	-20	-	+80	°C

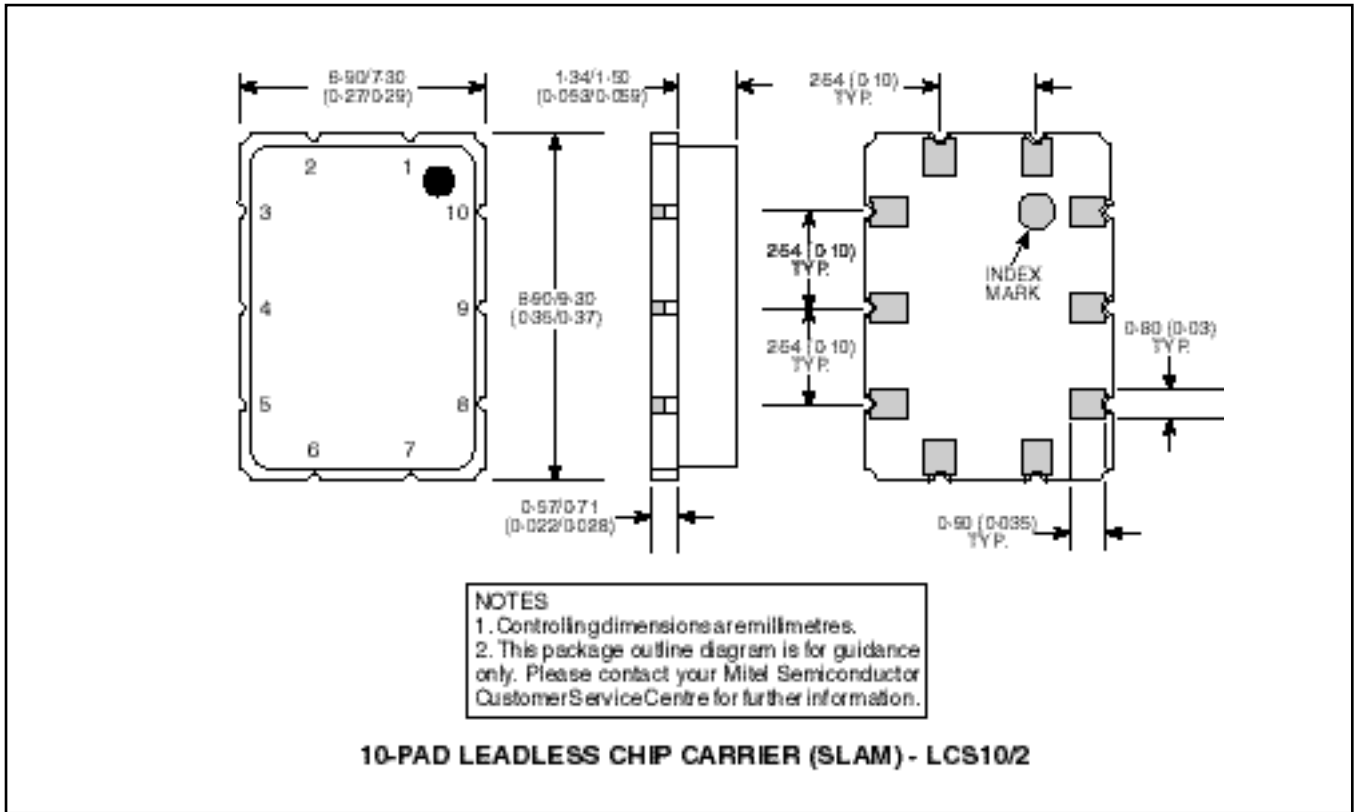
PLOT



# 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

These are supported by Agents and Distributors in major countries world-wide.

© Mitel Corporation 1998 Publication No. DS4025 Issue No. 1.4 October 1995

TECHNICAL DOCUMENTATION – NOT FOR RESALE. PRINTED IN UNITED KINGDOM

This publication is issued to provide information only which (unless agreed by the Company in writing) may not be used, applied or reproduced for any purpose nor form part of any order or contract nor to be regarded as a representation relating to the products or services concerned. No warranty or guarantee express or implied is made regarding the capability, performance or suitability of any product or service. The Company reserves the right to alter without prior notice the specification, design or price of any product or service. Information concerning possible methods of use is provided as a guide only and does not constitute any guarantee that such methods of use will be satisfactory in a specific piece of equipment. It is the user's responsibility to fully determine the performance and suitability of any equipment using such information and to ensure that any publication or data used is up to date and has not been superseded. These products are not suitable for use in any medical products whose failure to perform may result in significant injury or death to the user. All products and materials are sold and services provided subject to the Company's conditions of sale, which are available on request.

All brand names and product names used in this publication are trademarks, registered trademarks or trade names of their respective owners.