

The DW9256 has been designed specifically for the Personal Communications market, as an IF filter with a centre frequency of 133MHz. The filter utilises Mitel Semiconductor's low loss Transversal filter technology based on a Quartz substrate for excellent temperature stability.

A minimum 3dB passband of $\pm 75\text{kHz}$ is combined with a high shape factor to give good adjacent channel rejection.

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

FEATURES

- 133MHz Centre Frequency (f_0)
- Low Insertion Loss (7dB maximum)
- 3dB Passband $\pm 75\text{kHz}$ (minimum)
- Quartz Temperature Stability
- Low Profile Ceramic LCC Package

ABSOLUTE MAXIMUM RATINGS

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

NOMINAL IMPEDANCE

Input: 520W// 20pF
Output: 200W// 30pF

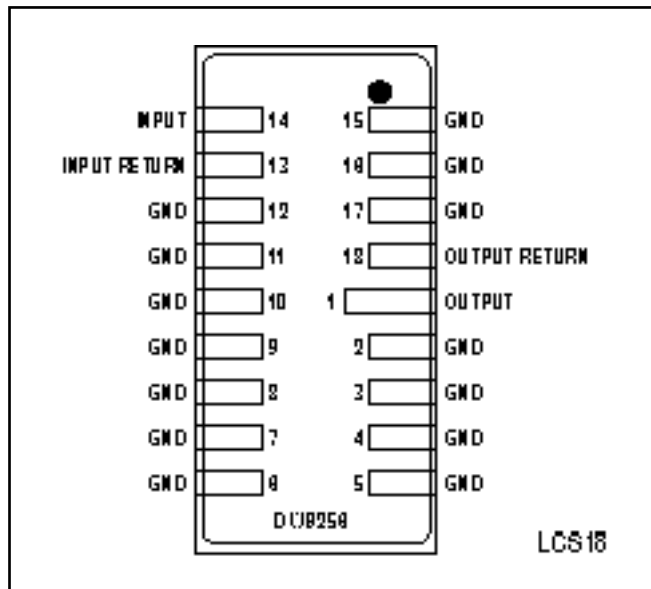
50W TEST BOARD COMPONENTS

Input: Series Ind. 180nH, Shunt Ind. 100nH, Shunt Cap. 2.2pF
Output: Shunt Ind. 68nH, Series Ind. 82nH

Components: Coilcraft 1008CS Inductors : Murata 0805 Capacitors

ORDERING INFORMATION

DW9256

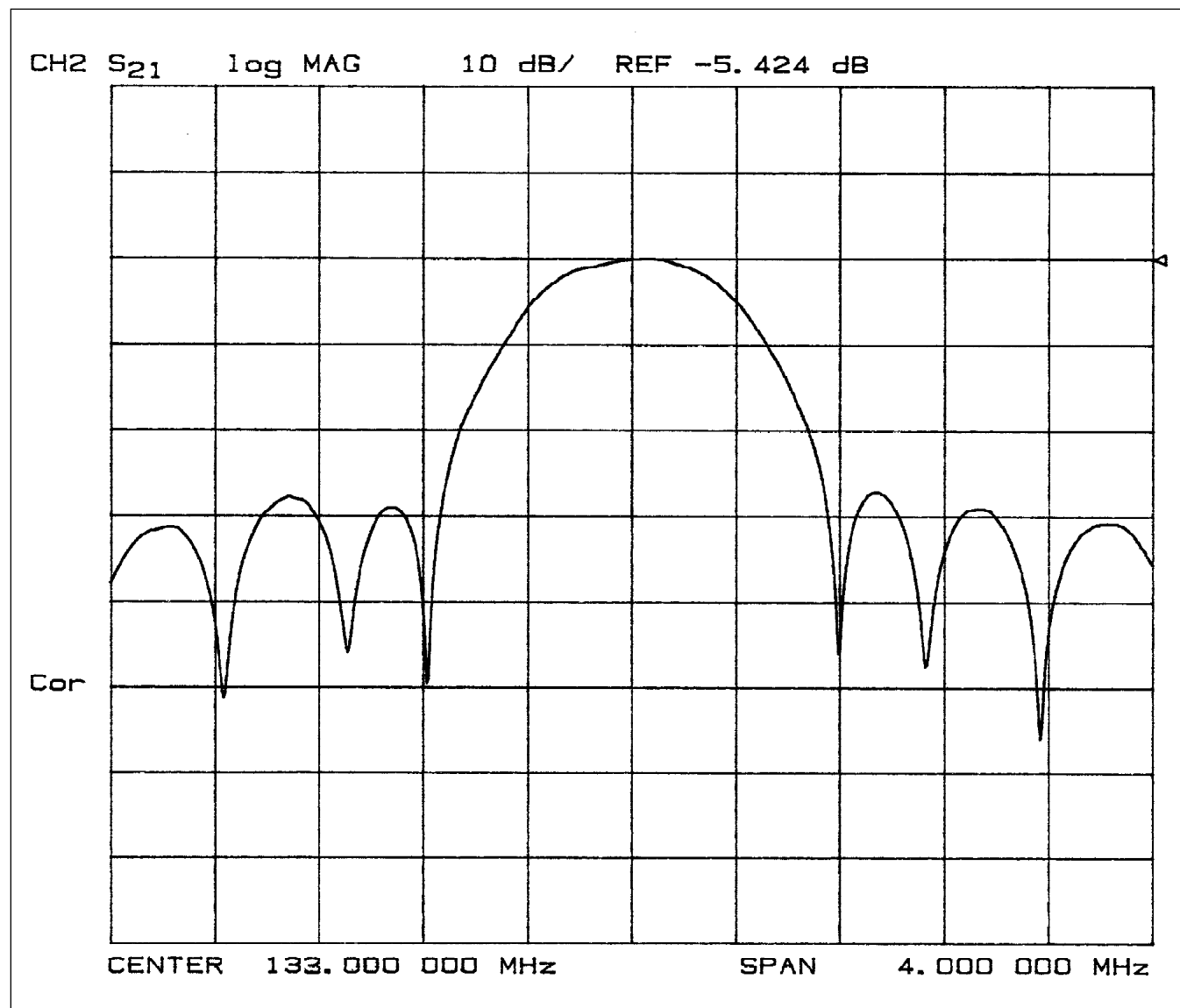


DW9256

ELECTRICAL CHARACTERISTICS @ 25°C

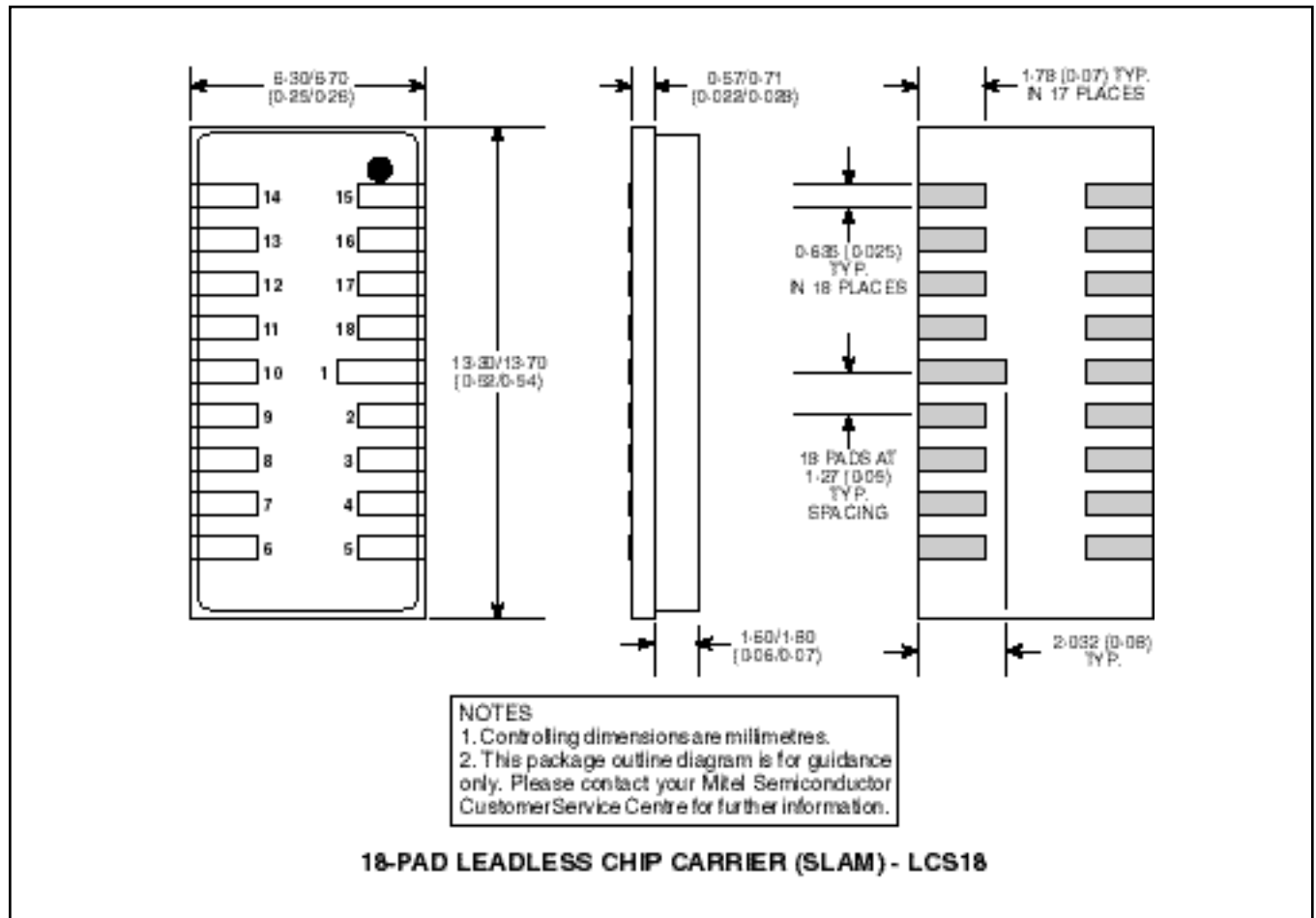
Parameter	Min	Typ	Max	Units
Centre Frequency	-	133	-	MHz
1dB Bandwidth	±75	±170	-	kHz
3dB Bandwidth	±75	±300	-	kHz
Insertion Loss	4	5	7	dB
Amplitude Ripple	-	0.5	2	dB
Group Delay Ripple	-	150	1000	ns
Stopband Rejection:				
fo ± 400 - 600 kHz	3	5	-	dB
fo ± 600 - 800 kHz	10	15	-	dB
fo ± 800 - 1500 kHz	20	30	-	dB
fo - 1500 kHz - 50 MHz	30	35	-	dB
fo + 1500 kHz + 200 MHz	30	35	-	dB
Operating Temperature Range	-20	-	+80	°C

PLOT



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. DS4026 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.