

DS4069-1.3

DW9265 196.99MHZ IF SAW FILTER FOR DIGITAL COMMUNICATIONS

The DW9265 is a 196.99MHz IF SAW filter for Wireless Digital Personal Communications Systems. A transversal structure, based on quartz, has been utilised to provide a design with excellent temperature stability over -10° to +60°C. With a typical 3dB passband of 576kHz, and in excess of 50dB rejection at fc ± 2.0 MHz, the filter provides good adjacent channel performance and low inter-symbol interference. The DW9265 also exhibits a low Group Delay Ripple (100ns typ.) and an in-band Amplitude Ripple of 0.2dB, thus making it the ideal choice for Digital Communications, especially for the unlicensed PCS, low range voice and data services market.

FEATURES

- 196.99MHz Centre Frequency (fc)
- Low Insertion Loss (9dB max.)
- 3db Passband 560kHz (min.)
- Quartz Temperature Stability
- Low Profile Ceramic LCC Package

ABSOLUTE MAXIMUM RATINGS



50 GPS Test Board Components

OU TPU

GND)

GND

GND;

GND

5

Input : Series Cap. 10pF, Shunt Ind. 27nH Output : Series Ind. 56nH, Shunt Cap. 33pF

Ξ₩

2

12

11

10

912 GND

D (09265

GND

GND

GND

LCS12#

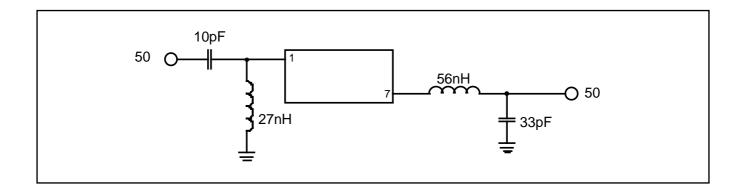
Components : Coilcraft 1008CS Inductors : Murata 0805 Capacitors

ORDERING INFORMATION

XXXX

Nominal Impedance:

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

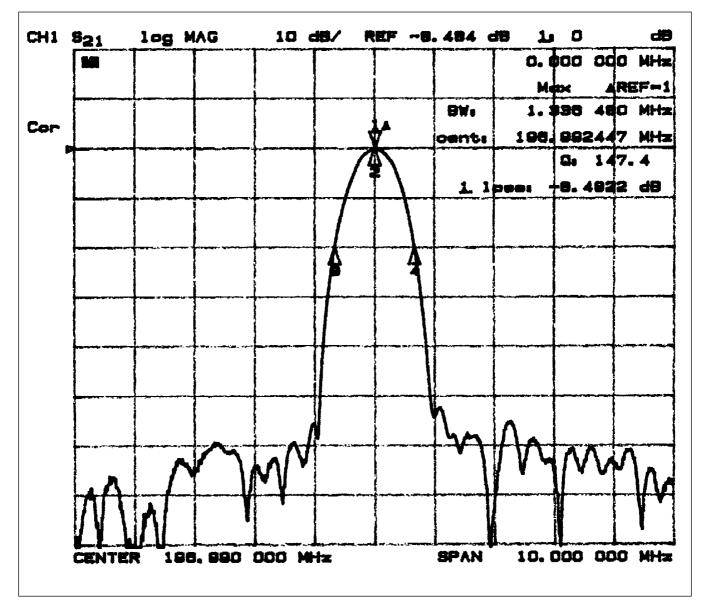


DW9265

ELECTRICAL CHARACTERISTICS @ 25°C

| Parameter | Min. | Тур. | Max. | Units |
|-----------------------|--------|--------|--------|-------|
| Centre Frequency (fc) | 196.96 | 196.99 | 197.02 | MHz |
| 3dB Bandwidth | 560 | 576 | 592 | kHz |
| Insertion Loss | - | 8.0 | 9.0 | dB |
| Group Delay Ripple | - | 100 | 200 | ns |
| Amplitude Ripple | - | 0.2 | 1.0 | dB |
| Stopband Rejection: | | | | |
| fc ±0.750MHz | 20 | 25 | - | dB |
| fc ±1.550MHz | 55 | 60 | - | dB |
| fc ±3.1 - ±8MHz | 55 | 60 | - | dB |
| Over 1MHz bandwidths | | | | |
| centred at | | 55 | - | dB |
| fc 10.0MHz | 55 | 60 | - | dB |
| fc 20.0MHz | 55 | 70 | - | dB |

Operating Temperature Range: -10 to +50°C

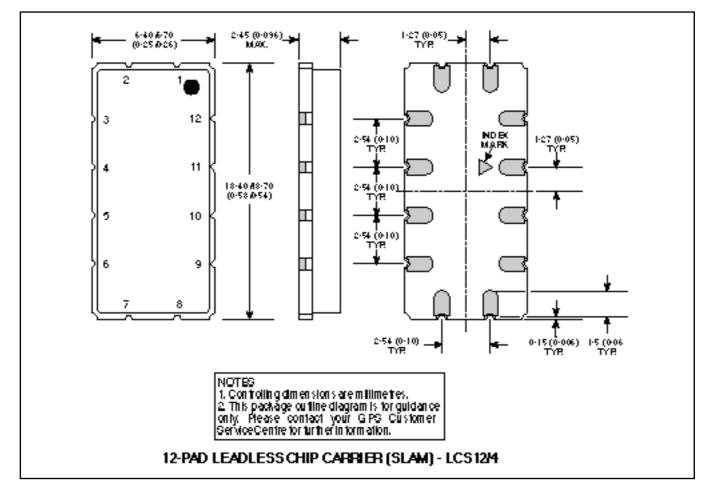


Typical Response of DW9265

DW9265

PACKAGE DETAILS

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



🚟 GEC PLESSEY SEMICONDUCTORS

HEADQUARTERS OPERATIONS GEC PLESSEY SEMICONDUCTORS

Cheney Manor, Swindon, Wiltshire SN2 2QW, United Kingdom. Tel: (01793) 518000 Fax: (01793) 518411

GEC PLESSEY SEMICONDUCTORS

P.O. Box 660017 1500 Green Hills Road, Scotts Valley, California 95067-0017, United States of America. Tel: (408) 438 2900 Fax: (408) 438 5576

- CUSTOMER SERVICE CENTRES
- FRANCE & BENELUX Les Ulis Cedex Tel: (1) 69 18 90 00 Fax : (1) 64 46 06 07
- GERMANY Munich Tel: (089) 3609 06-0 Fax : (089) 3609 06-55
- ITALY Milan Tel: (02) 66040867 Fax: (02) 66040993
- JAPAN Tokyo Tel: (03) 5276-5501 Fax: (03) 5276-5510
- NORTH AMERICA Scotts Valley, USA Tel (408) 438 2900 Fax: (408) 438 7023.
- 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 5461260. Fax: 886 2 7190260
- UK, EIRE, DENMARK, FINLAND & NORWAY
- Swindon Tel: (01793) 518527/518566 Fax : (01793) 518582 These are supported by Agents and Distributors in major countries world-wide. © GEC Plessey Semiconductors 1995 Publication No. DS4069 Issue No. 1.3 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 This pollication is issued to prove information only which dues a generative in the state of the company in which dues as a representation relation of any pollication 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 or 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 suitability of any meducts and materials are sold and services provided subject to the Company's conditions of sale, which are available on request.