

DW9249

112.32MHz SAW I.F. FILTER FOR DECT PERSONAL COMMUNICATIONS

(Supersedes version in February 1994 Microwave Products Handbook, HB3198-2)

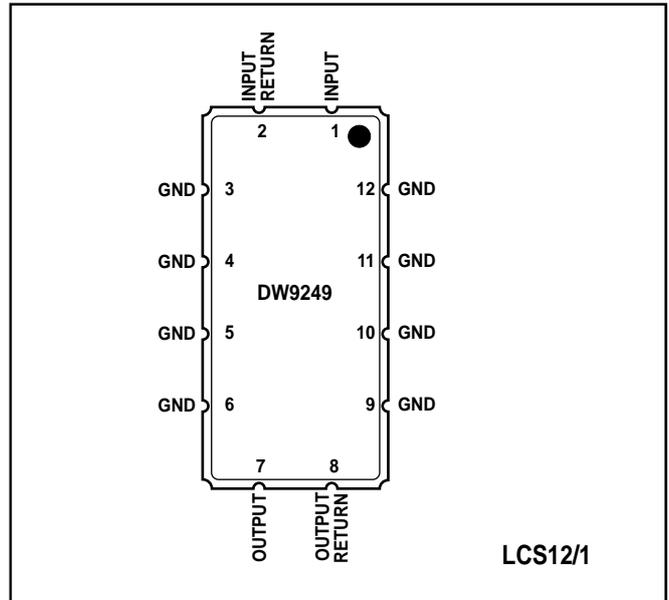
The DW9249 112.32MHz SAW I.F. filter has been specifically developed for the Digital European Cordless Telephone (DECT) market.

By using a centre frequency of 112.32MHz, the DW9249 overcomes the potential problems of 6th and 8th harmonic interference often associated with filters centred at 110.592MHz.

The filter offers excellent temperature stability, (ST-Quartz substrate) plus low Group Delay Ripple ($\pm 100\text{ns}$ max.) and is available in the latest, low profile ceramic surface mount package technology.

FEATURES

- Extremely Low Group Delay Ripple
- Wide Operating Temperature
- High Co-channel rejection
- High Adjacent Channel Rejection
- Highly Reproduceable Impedance Characteristics
- Balanced or Unbalanced Drive
- Low Profile Leadless Ceramic Surface Mount Package Suitable for Automated Assembly



ABSOLUTE MAXIMUM RATINGS

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

NOMINAL IMPEDANCE

Input: 1.1k Ω // 9.25pF
 Output: 1.2k Ω // 12pF

50 Ω GPS TEST BOARD COMPONENTS

Input: Series Ind. 180nH, Shunt Cap. 60.7pF
 Output: Series Ind. 100nH

Components: Coilcraft 1008CS Inductors : Murata 0805 Capacitors

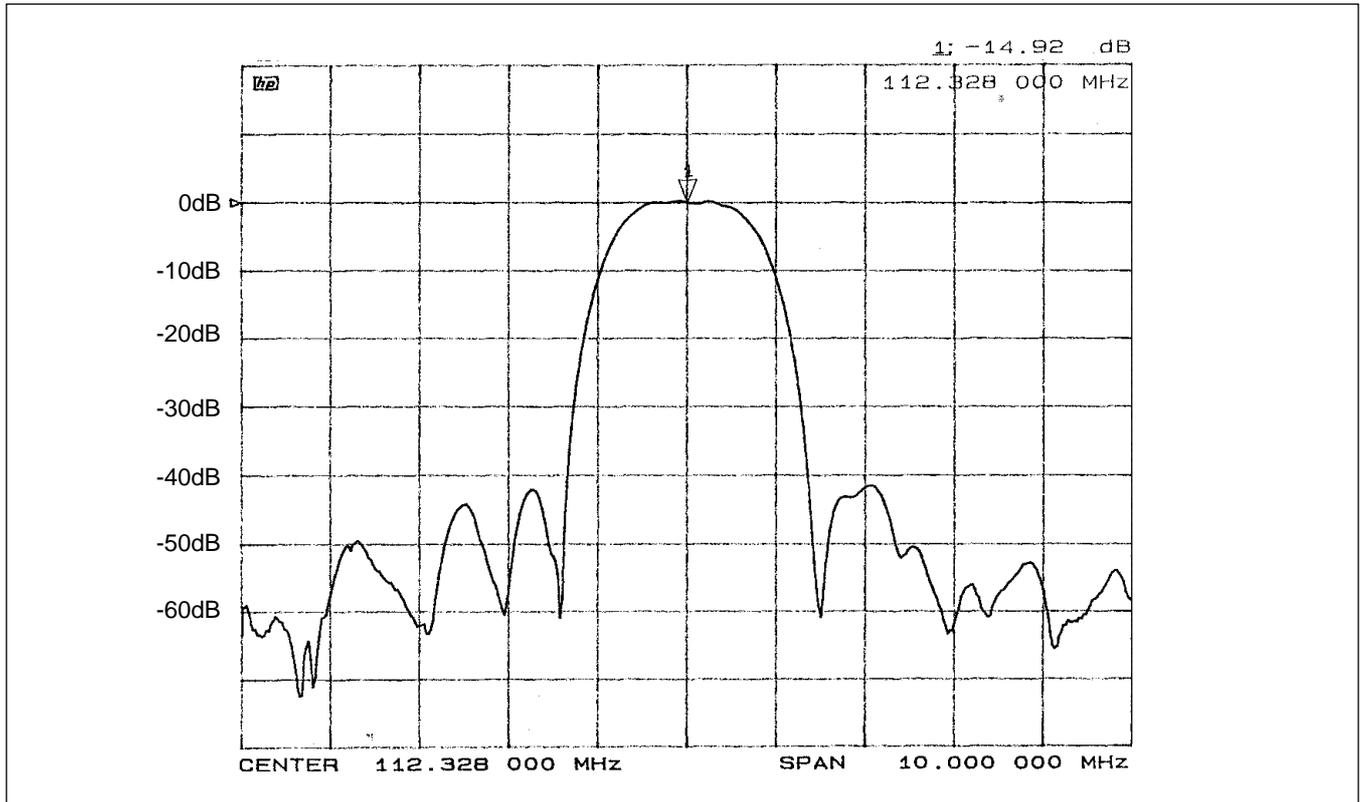
ORDERING INFORMATION

DW9249

REFERENCE APPLICATION NOTE:

DW9249 - SAW Bandpass Filter for D.E.C.T.

DW9249



Typical Response of DW9249

ELECTRICAL CHARACTERISTICS @ 25°C

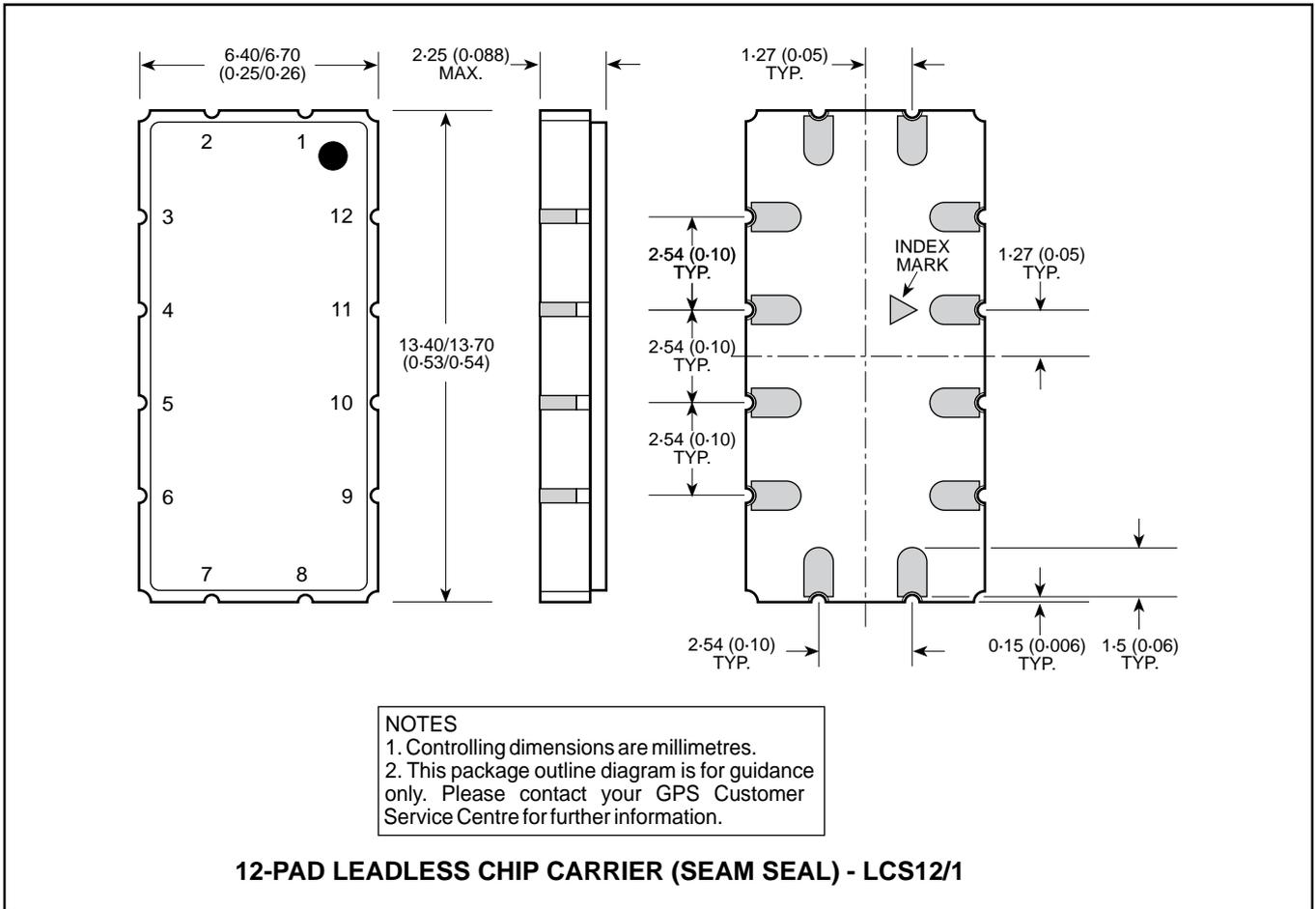
Parameter	Typ		Units
Centre Frequency (F ₀)		112.320	MHz
-3dB Bandwidth	±720	±576	KHz
Group Delay Ripple (F ₀ ±576kHz)	±80	±100 (Max)	ns
Insertion Loss	15	16 (Max)	dB
Stopband Attenuation:			
F ₀ ±1.152MHz	20	>15	dB
F ₀ ±1.728MHz	40	>30	dB
F ₀ ±3.556MHz	45	>40	dB
F ₀ ±5MHz	50	>45	dB
Amplitude Ripple (pk to pk)	±0.4	±0.6	dB
Operating Temperature Range		-20 to +85	°C

GPS reserves the right to modify these 'datasheets' when necessary to provide optimum performance and cost.

DW9249

PACKAGE DETAILS

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



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. DS3811 Issue No. 3.4 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.