

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**

TEST BOARD COMPONENTS

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

Components: Coilcraft 1008CS Inductors : Murata
0805 Capacitors

ORDERING INFORMATION

Order as: DW9249

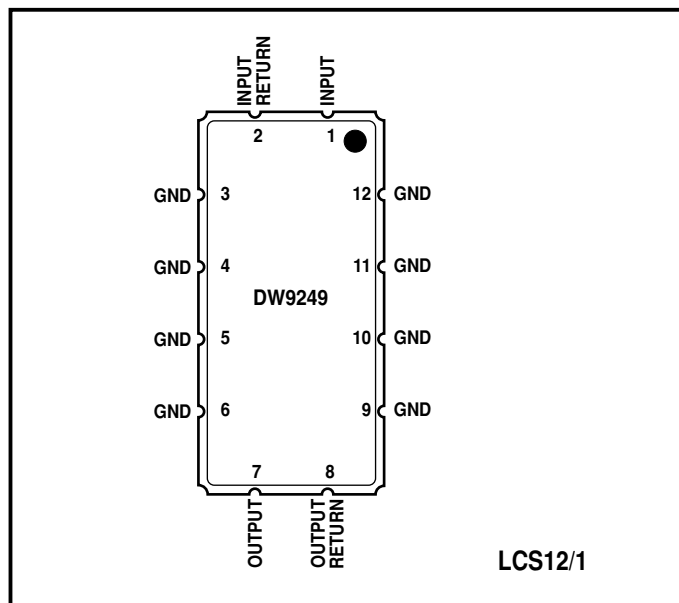


Fig. 1 Pin connections

REFERENCE APPLICATION NOTE:

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

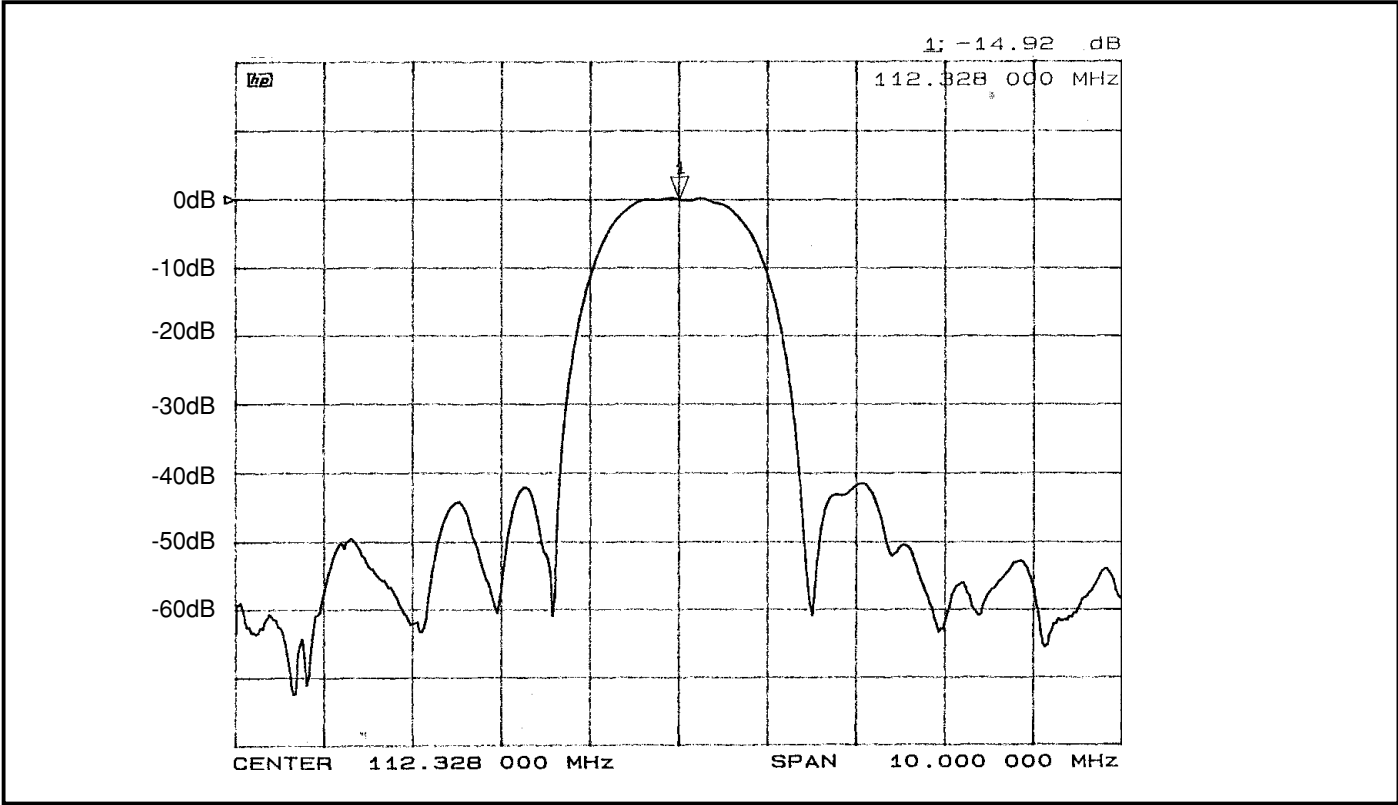


Fig. 2 Typical Response of DW9249

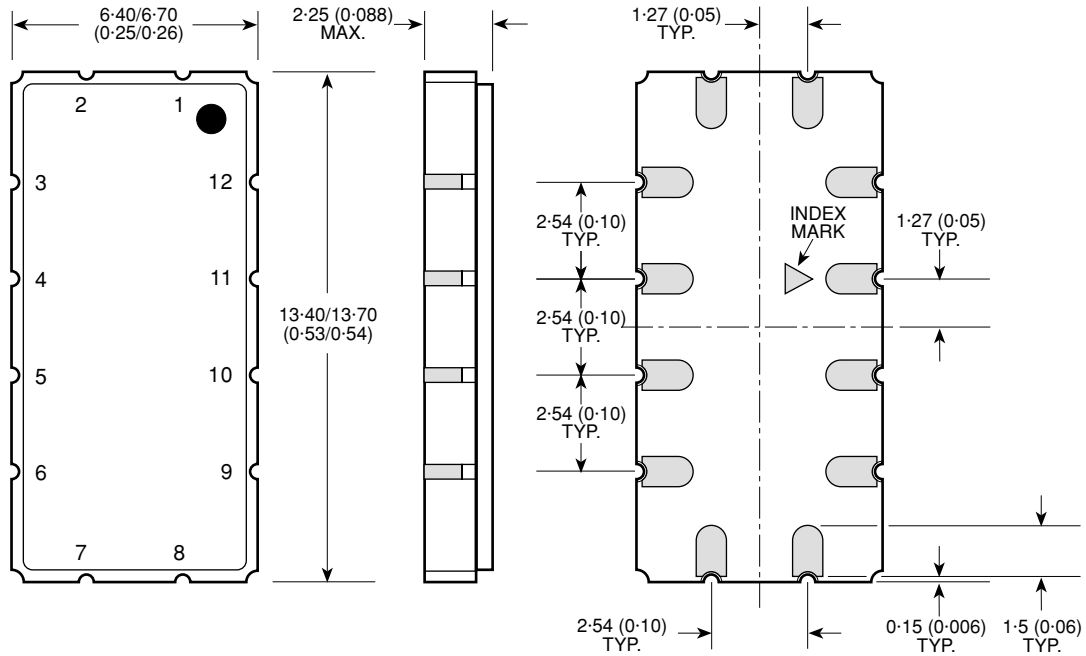
ELECTRICAL CHARACTERISTICS @ 25°C

Parameter	Typ		Units
Centre Frequency (F_0)		112.320	MHz
-3dB Bandwidth	± 720	± 576	KHz
Group Delay Ripple ($F_0 \pm 576\text{kHz}$)	± 80	± 100 (Max)	ns
Insertion Loss	15	16 (Max)	dB
Stopband Attenuation:			
$F_0 \pm 1.152\text{MHz}$	20	>15	dB
$F_0 \pm 1.728\text{MHz}$	40	>30	dB
$F_0 \pm 3.556\text{MHz}$	45	>40	dB
$F_0 \pm 5\text{MHz}$	50	>45	dB
Amplitude Ripple (pk to pk)	± 0.4	± 0.6	dB
Operating Temperature Range		-20 to +85	°C

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

PACKAGE DETAILS

Dimensions are shown thus: mm (in). DO NOT SCALE. For further package information, please contact Customer Services.



NOTES

1. Controlling dimensions are millimetres.
2. This package outline diagram is for guidance only. Please contact Dynex Semiconductor Customer Services for further information.

12-PAD LEADLESS CHIP CARRIER (SEAM SEAL) - LCS12/1



<http://www.dynexsemi.com>

e-mail: power_solutions@dynexsemi.com

HEADQUARTERS OPERATIONS
DYNEX SEMICONDUCTOR LTD
Doddington Road, Lincoln.
Lincolnshire. LN6 3LF. United Kingdom.
Tel: 00-44-(0)1522-500500
Fax: 00-44-(0)1522-500550

CUSTOMER SERVICE
Tel: +44 (0)1522 502753 / 502901. Fax: +44 (0)1522 500020

SALES OFFICES
Benelux, Italy & Switzerland: Tel: +33 (0)1 64 66 42 17. Fax: +33 (0)1 64 66 42 19.
France & Spain: Tel: +33 (0)2 47 55 75 52. Fax: +33 (0)2 47 55 75 59.
Germany, Northern Europe & Rest Of World: Tel: +44 (0)1522 502753 / 502901. Fax: +44 (0)1522 500020
North America: Toll Free: 1.888.33.DYNEX (39639) / Tel: (949) 733-3005. Fax: (949) 733-2986.

These offices are supported by Representatives and Distributors in many countries world-wide.
© Dynex Semiconductor 2002 Publication No. DS3811-4 Issue No. 4.1 July 2002
TECHNICAL DOCUMENTATION – NOT FOR RESALE. PRODUCED IN UNITED KINGDOM

Datasheet Annotations:

Dynex Semiconductor annotate datasheets in the top right hand corner of the front page, to indicate product status. The annotations are as follows:-

Target Information: This is the most tentative form of information and represents a very preliminary specification. No actual design work on the product has been started.

Preliminary Information: The product is in design and development. The datasheet represents the product as it is understood but details may change.

Advance Information: The product design is complete and final characterisation for volume production is well in hand.

No Annotation: The product parameters are fixed and the product is available to datasheet specification.

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.