DW9249

112.32MHz SAW IF Filter

Replaces July 2002 version, DS3811-4.1

DS3811-5.0 January 2003

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 (±100ns max.) and is available in the latest, low profile ceramic surface mount package technology.

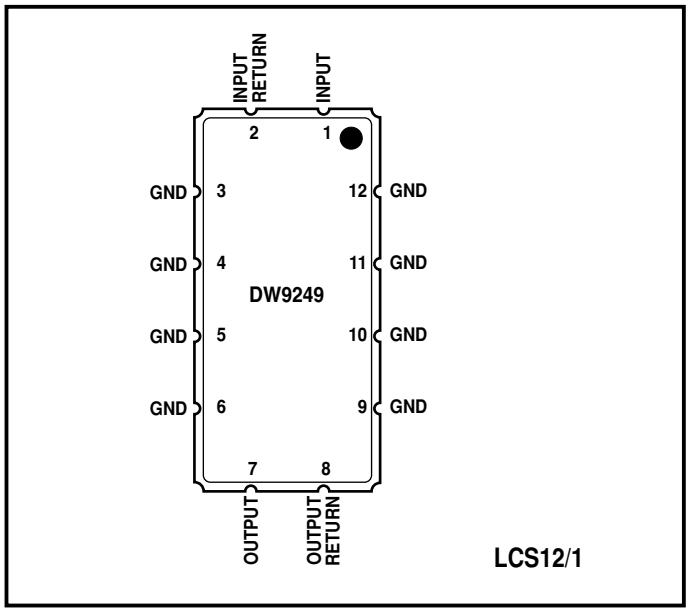


Fig. 1 Pin connections

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: 1.1kΩ // 9.25pF

Output: 1.2kΩ // 12pF**50Ω**

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

REFERENCE APPLICATION NOTE:

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

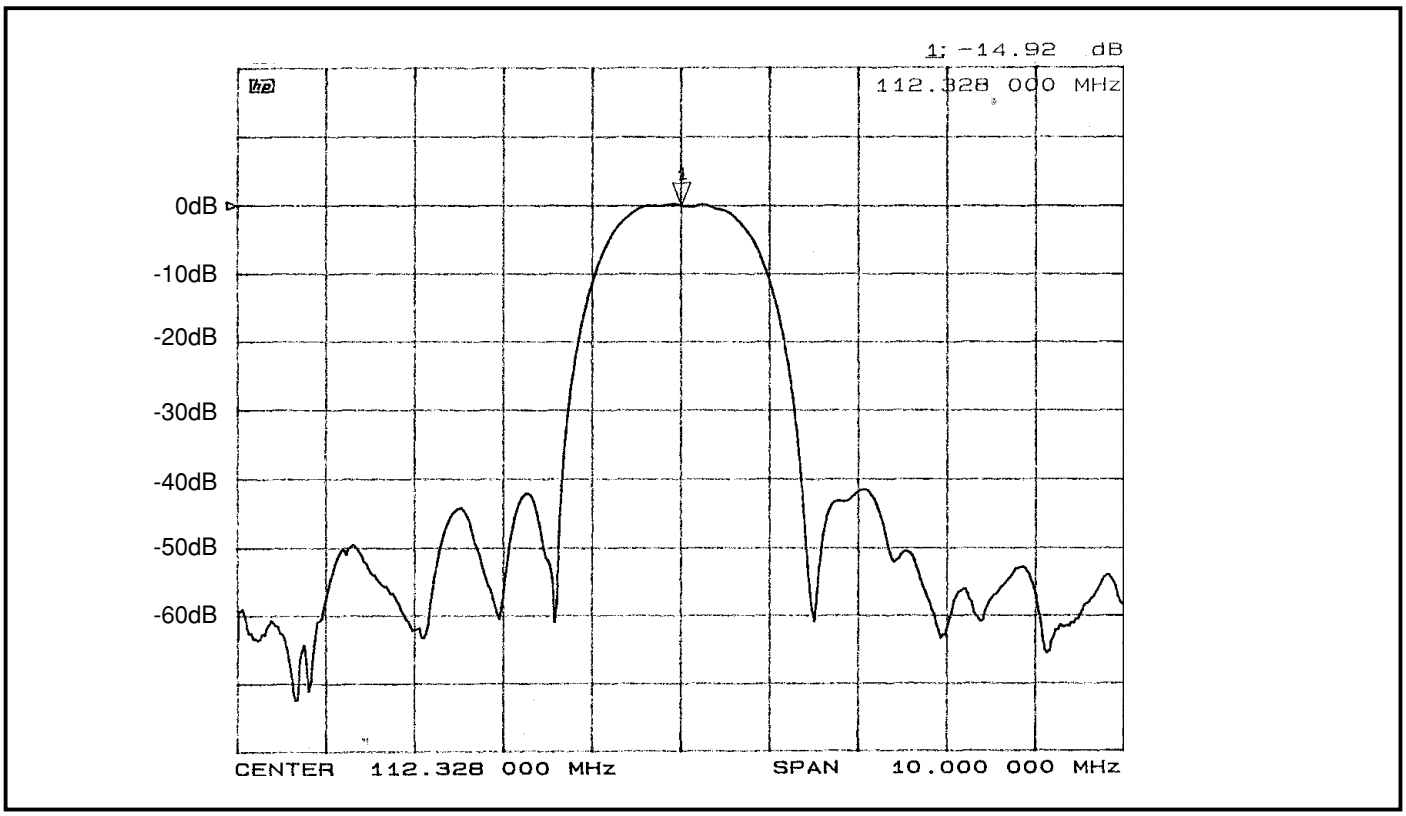


Fig. 2 Typical Response of DW9249

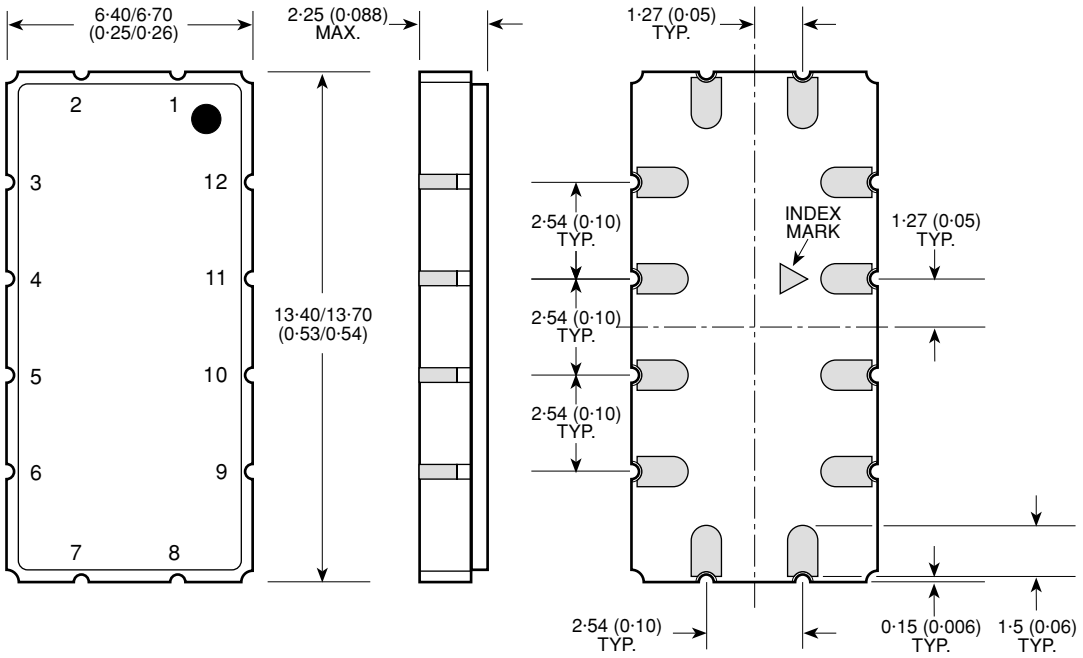
ELECTRICAL CHARACTERISTICS @ 25°C

Parameter	Typ		Units
Centre Frequency (F_O)		112.320	MHz
-3dB Bandwidth	±720	±576	KHz
Group Delay Ripple (F_O±576kHZ)	±80	±100 (Max)	ns
Insertion Loss	15	16 (Max)	dB
Stopband Attenuation:			
F_O ±1.152MHz	20	>15	dB
F_O ±1.728MHz	40	>30	dB
F_O ±3.556MHz	45	>40	dB
F_O ±5MHz	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.

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Datasheet Annotations:

Dynex Semiconductor annotate datasheets in the top right hard 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.