

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: $1.1\text{k}\Omega // 9.25\text{pF}$
Output: $1.2\text{k}\Omega // 12\text{pF}$

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.

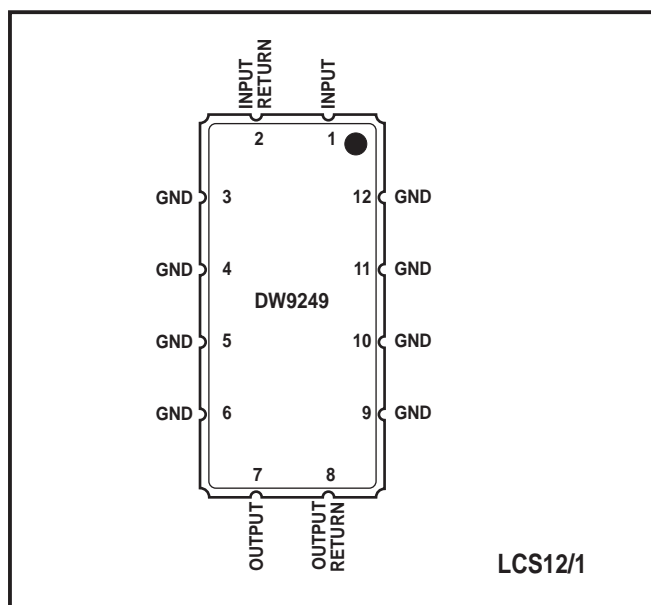


Fig. 1 Pin connections

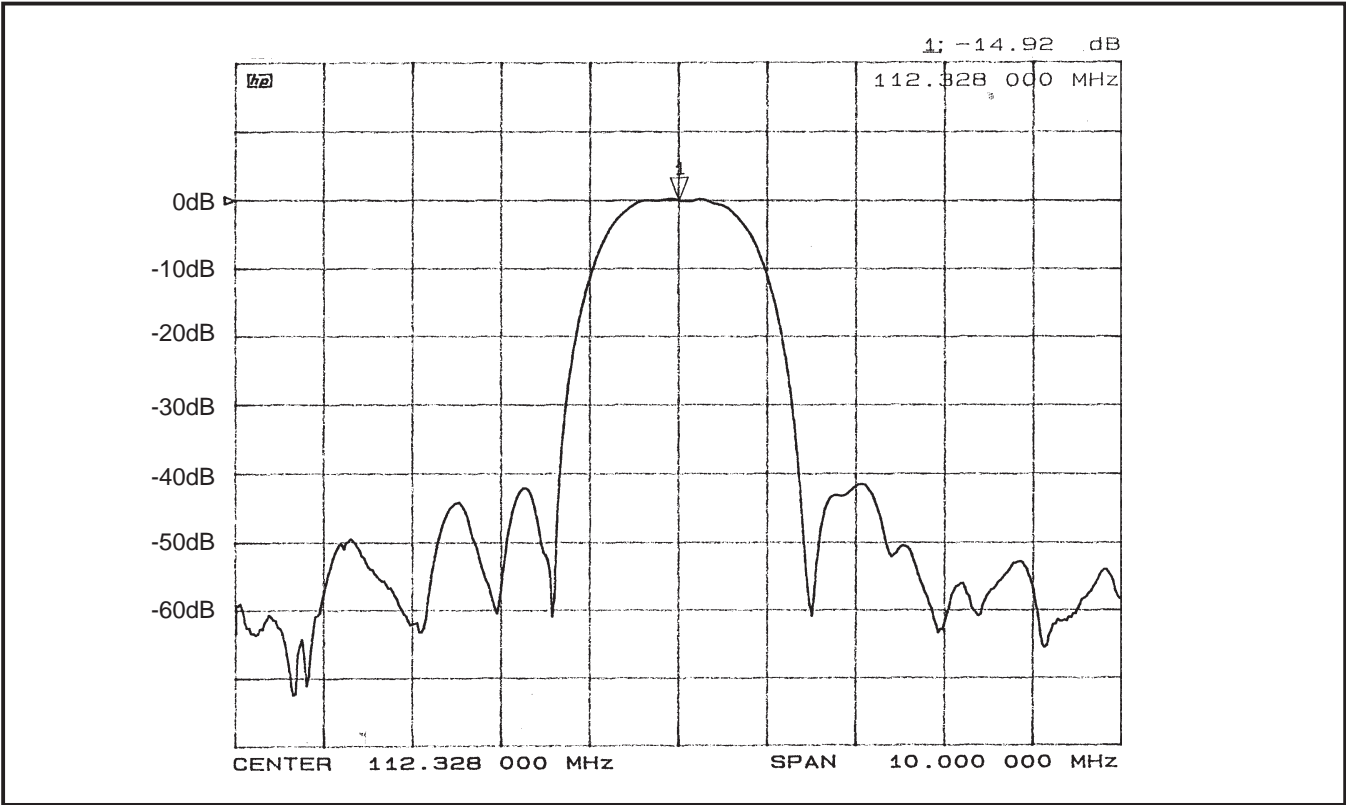


Fig. 2Typical Response of DW9249

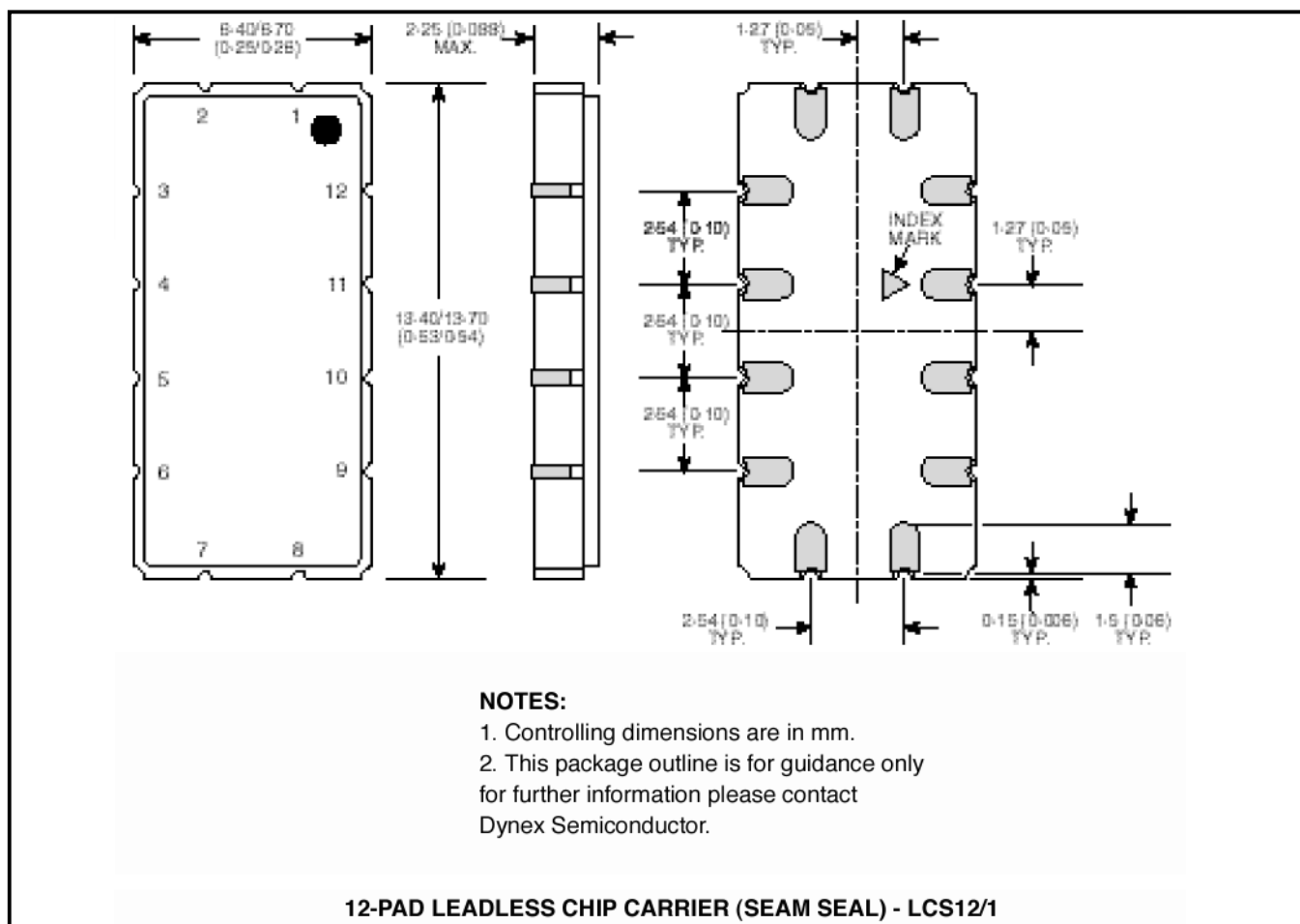
ELECTRICAL CHARACTERISTICS @ 25°C

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

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

PACKAGE DETAILS

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



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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.

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