

112.32MHz SAW IF Filter

Preliminary Information

DS3811 - 3.4 October 11995

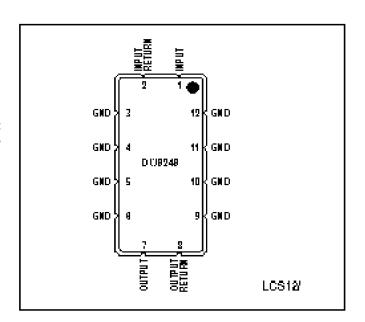
The DW9249 112.32MHz SAW I.F. filter has been specifically developed for the Digital European Cordless Telephone (DECT) market.

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.

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

 $\begin{array}{ll} \text{Input:} & 1.1 \text{k}\Omega \text{ // } 9.25 \text{pF} \\ \text{Output:} & 1.2 \text{k}\Omega \text{ // } 12 \text{pF} \end{array}$

50Ω TEST BOARD COMPONENTS

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

Output: Series Ind. 100nH

Components: Coilcraft 1008CS Inductors: Murata 0805 Capacitors

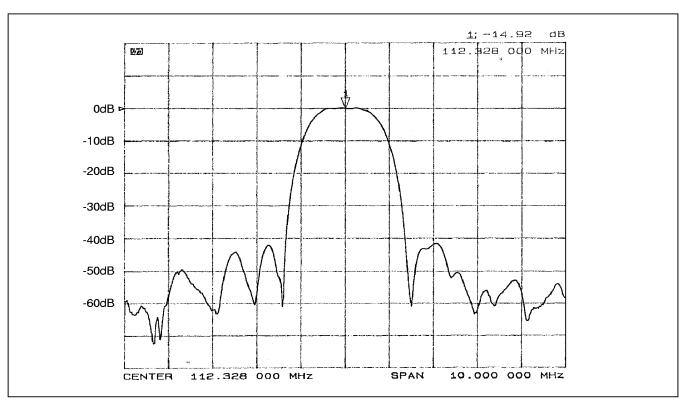
ORDERING INFORMATION

DW9249

REFERENCE APPLICATION NOTE:

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

DW9249



Typical Response of DW9249

ELECTRICAL CHARACTERISTICS @ 25°C

Parameter	Тур		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	$\mathcal C$

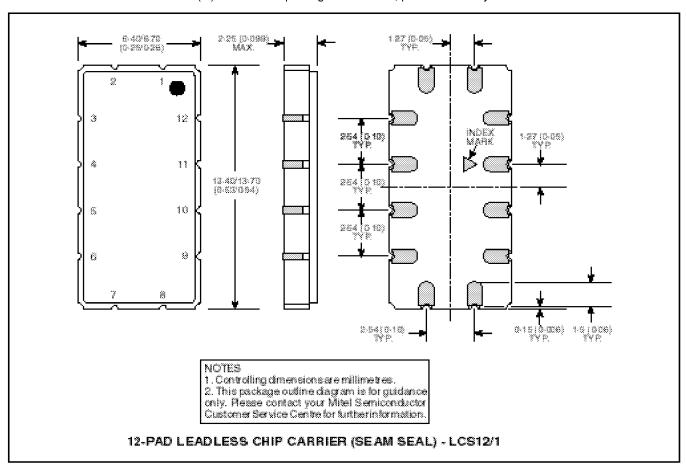
GPS reserves the right to modify these 'datasheets' when necessary to provide optimum performance and cost.

DW9249

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PACKAGE DETAILS

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





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