

The DW9253 110.592MHz SAW I.F. filter has been specifically developed for the Digital European Cordless Telephone (DECT) market.

The filter offers excellent temperature stability, (ST-Quartz substrate) plus low Group Delay Ripple ( $\pm 125\text{ns}$  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

### 50Ω TEST BOARD COMPONENTS

Input: Series Ind. 180nH, Shunt Cap. 72pF

Output: Series Ind. 100nH

Components: Coilcraft 1008CS Inductors : Murata 0805 Capacitors

### ORDERING INFORMATION

Order as: **DW9253**

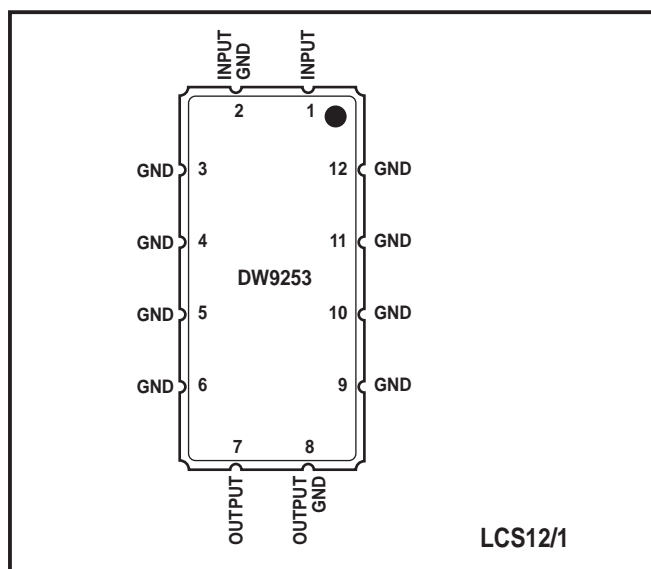


Fig. 1 Pin connections

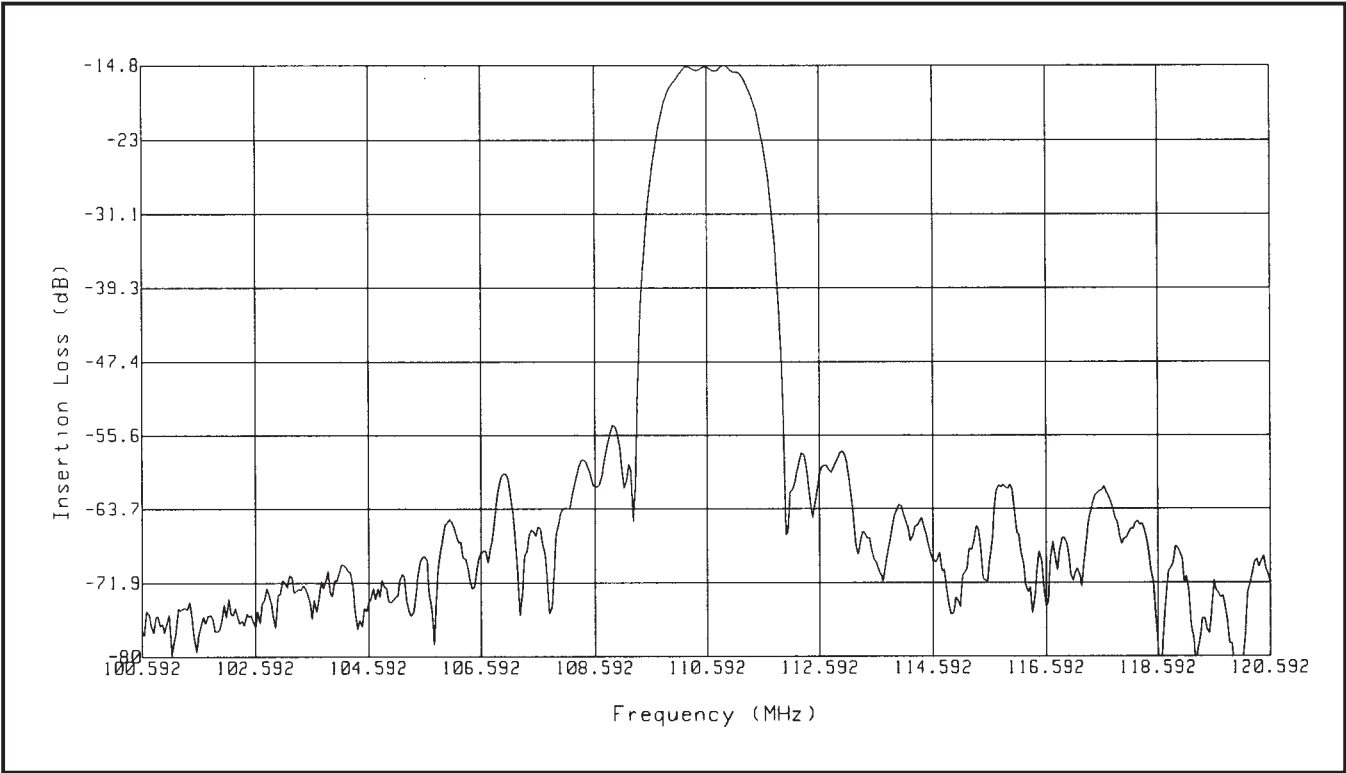


Fig.2 Typical Response of DW9253

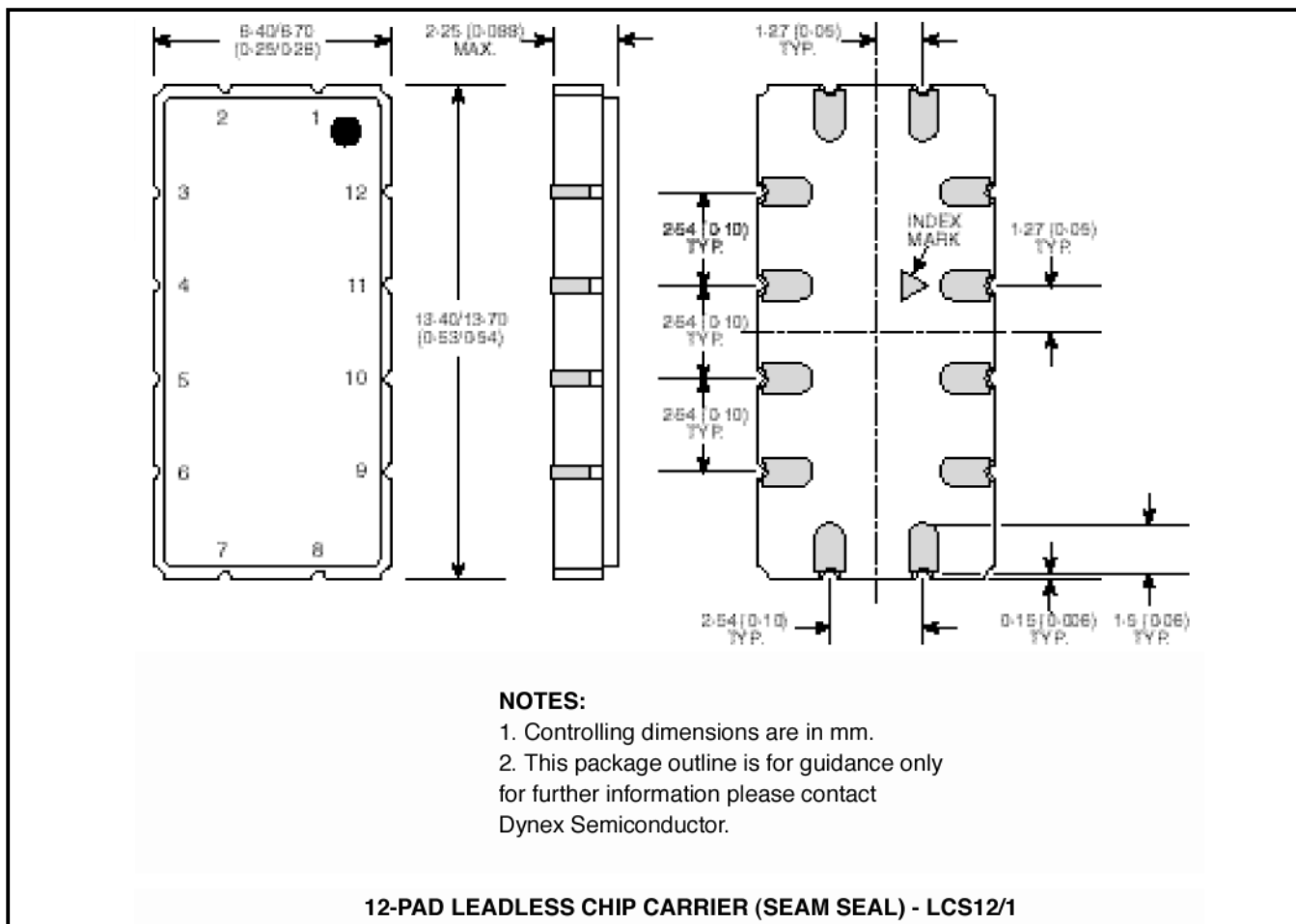
ELECTRICAL CHARACTERISTICS @ 25°C

Parameter	Typ	Min	Units
Centre Frequency (F <sub>0</sub> )	110.592		MHz
-3dB Bandwidth	±700	±576	KHz
Group Delay Ripple (F <sub>0</sub> ±576kHz)	±95	±125 (Max)	ns
Insertion Loss	15	16 (Max)	dB
Stopband Attenuation:			
F <sub>0</sub> ±1.152MHz	20	>15	dB
F <sub>0</sub> ±1.728MHz	40	>30	dB
F <sub>0</sub> ±3.556MHz	45	>40	dB
F <sub>0</sub> ±5MHz	46	>42	dB
Amplitude Ripple (pk to pk)	±0.4	±0.6	dB
Input Impedance		1.1KΩ // 9.25pF	
Output Impedance		1.2KΩ // 12pF	
Operating Temperature Range		-20 to +85	°C

Dynex Semiconductor 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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