



# 110.592MHz SAW IF Filter

# **Preliminary Information**

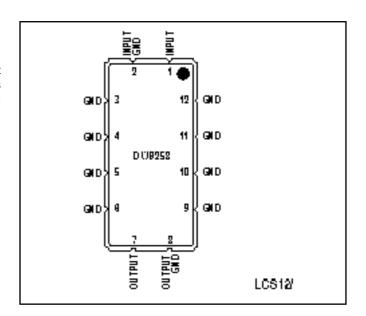
DS3976 - 2.1 October 1995

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 (±125ns 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

#### 50 TEST BOARD COMPONENTS

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

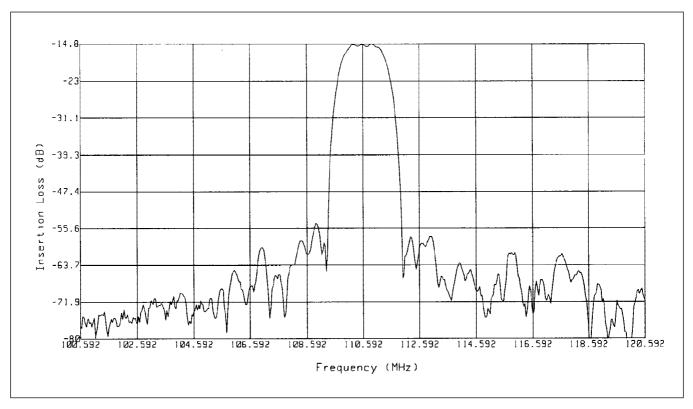
Output: Series Ind. 100nH

Components: Coilcraft 1008CS Inductors: Murata 0805 Capacitors

## **ORDERING INFORMATION**

DW9253

# DW9253



Typical Response of DW9253

# **ELECTRICAL CHARACTERISTICS** @ 25°C

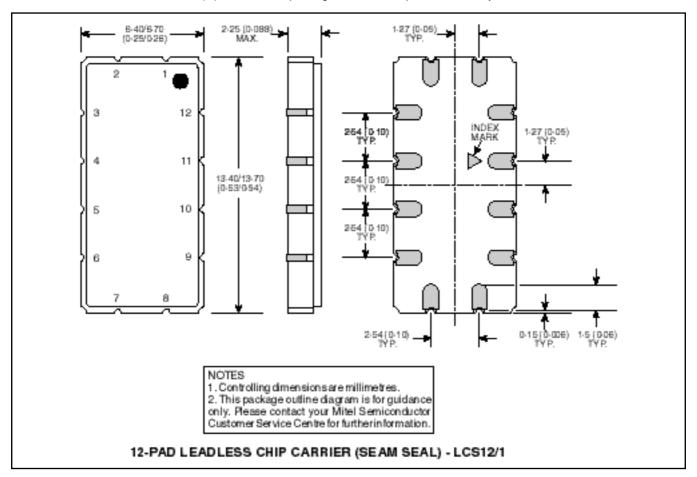
Parameter	Тур	Min	Units
Centre Frequency (F <sub>0</sub> )	110.592		MHz
-3dB Bandwidth	±700	±576	KHz
Group Delay Ripple (F <sub>O</sub> ±576kHZ)	±95	±125 (Max)	ns
Insertion Loss	15	16 (Max)	dB
Stopband Attenuation:	00	45	15
$F_0 \pm 1.152 MHz$ $F_0 \pm 1.728 MHz$	20 40	>15 >30	dB dB
$F_0 \pm 3.556MHz$	45	>40	dВ
F <sub>O</sub> ±5MHz	46	>42	dB
Amplitude Ripple (pk to pk)	±0.4	±0.6	dB
Input Impedance		1.1K // 9.25pF	
Output Impedance		1.2K // 12pF	
Operating Temperature Range		-20 to +85	°C

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

#### DW9253

# **PACKAGE DETAILS**

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





## SEMICONDUCTOR

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