

## 92.025MHz IF SAW Filter

# **Preliminary Information**

DS4082 - 1.6 November 1995

The DW9274 SAW filter is a Quartz based device offering narrow band, highly selective performance with excellent temperature stability characteristics, which make it an ideal choice for E-TACs cellular mobile phone requirements.

The device is available in a Surface Mount leadless, ceramic chip carrier suitable for high volume, automated assembly systems.

#### **FEATURES**

- 92.025MHz Centre Frequency (fo)
- Insertion Loss 3dB (Typ)
- 3dB Bandwidth 30kHz (Min)
- Quartz Temperature Stability
- Low Profile Ceramic SMT Package

## **ABSOLUTE MAXIMUM RATINGS**

DC Voltage VDV 0V Maximum Input Level 0dBm

#### **ORDERING INFORMATION**

DW9274

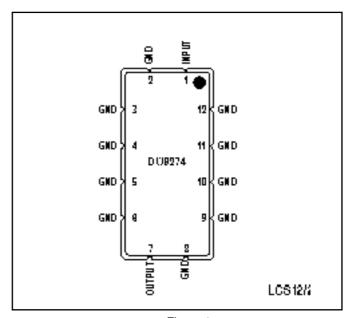


Figure 1

### **ELECTRICAL SPECIFICATION** @25°C

Parameter	Spec	Тур	Units
Nominal Frequency (fo)	92.025	92.025	MHz
Passband Insertion Loss (IL) 3dB Bandwidth Ripple (fo±15kHz) Group Delay (fo±15kHz)	4 Max 30 Min 1 Max	3 63 0.5 <4	dB kHz dB µs
Stopband fo±50kHz fo±100kHz fo+200kHz to fo +500kHz fo+500kHz to fo +1000kHz fo-300kHz to fo -900kHz fo-900kHz to fo -920kHz fo-920kHz to fo -1000kHz Maximum Input Level	5 35 25 40 60 70 60	7 40 45 55 70 75 70	dB dB dB dB dB dB dB dB
Operating Temperature Range	-10 to +65°C		
Package	12 Lead Ceramic LCC 13.6 x 6.8 x 1.93mm (Max).		
Terminating Impedance	850 //-2pf		

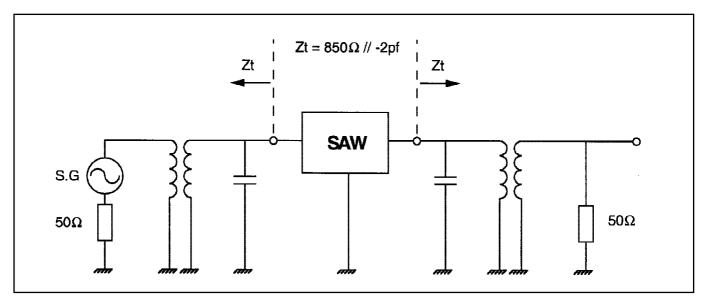


Figure 2: 50 Test Circuit

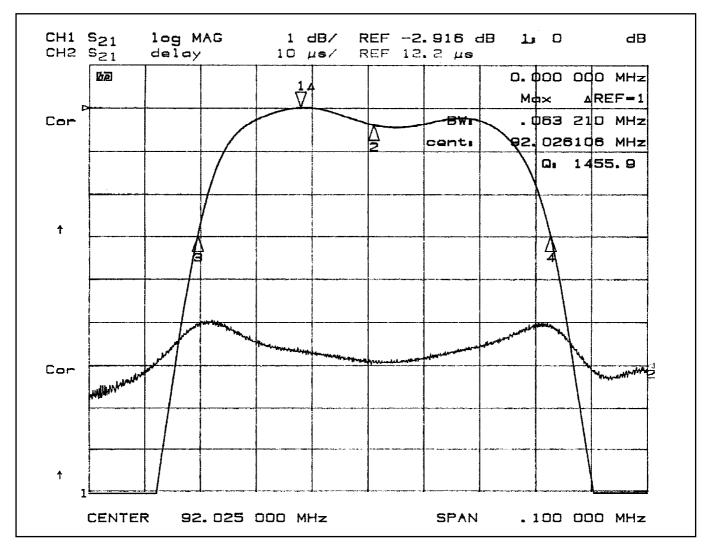


Figure 3: Passband and Group Delay Characteristics

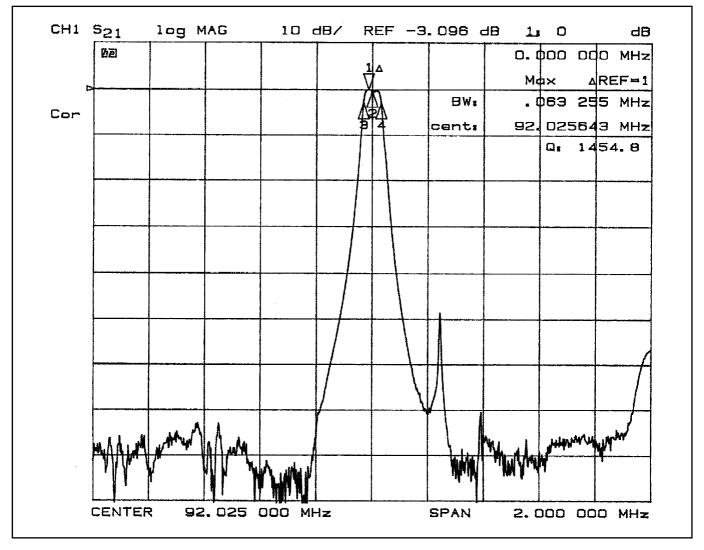
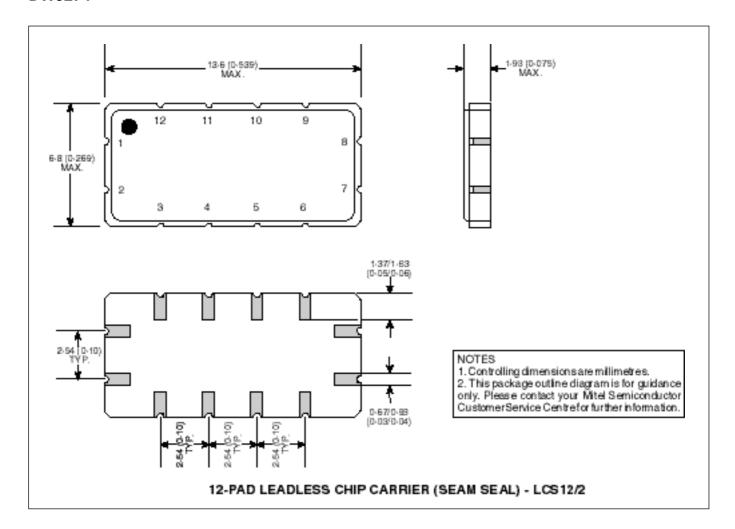


Figure 4: Stopband Rejection Characteristics





**HEADQUARTERS OPERATIONS** 

#### MITEL SEMICONDUCTOR

Cheney Manor, Swindon, Wiltshire SN2 2QW, United Kingdom.

Tel: (01793) 518000 Fax: (01793) 518411

#### MITEL SEMICONDUCTOR

1500 Green Hills Road, Scotts Valley, California 95066-4922 United States of America. Tel (408) 438 2900 Fax: (408) 438 5576/6231 Internet: http://www.gpsemi.com

CUSTOMER SERVICE CENTRES

- FRANCE & BENELUX Les Ulis Cedex Tel: (1) 69 18 90 00 Fax: (1) 64 46 06 07
- GERMANY Munich Tel: (089) 419508-20 Fax: (089) 419508-55
- ITALY Milan Tel: (02) 6607151 Fax: (02) 66040993
- JAPAN Tokyo Tel: (03) 5276-5501 Fax: (03) 5276-5510
- KOREA Seoul Tel: (2) 5668141 Fax: (2) 5697933
- NORTH AMERICA Scotts Valley, USA Tel: (408) 438 2900 Fax: (408) 438 5576/6231
- SOUTH EAST ASIA Singapore Tel:(65) 3827708 Fax: (65) 3828872
- SWEDEN Stockholm Tel: 46 8 702 97 70 Fax: 46 8 640 47 36
- TAIWAN, ROC Taipei Tel: 886 2 25461260 Fax: 886 2 27190260
- UK, EIRE, DENMARK, FINLAND & NORWAY

Swindon Tel: (01793) 726666 Fax: (01793) 518582

These are supported by Agents and Distributors in major countries world-wide.

© Mitel Corporation 1998 Publication No. DS4082 Issue No. 1.6 November 1995
TECHNICAL DOCUMENTATION – NOT FOR RESALE. PRINTED IN UNITED KINGDOM

This publication is issued to provide information only which (unless agreed by the Company in writing) may not be used, applied or reproduced for any purpose nor form part of any order or contract nor to be regarded as a representation relating to the products or services concerned. No warranty or guarantee express or implied is made regarding the capability, performance or suitability of any product or service. The Company reserves the right to alter without prior notice the specification, design or price of any product or service. Information concerning possible methods of use will be satisfactory in a specific piece of equipment. It is the user's responsibility to fully determine the performance and suitability of any equipment using such information and to ensure that any publication or data used is up to date and has not been superseded. These products are not suitable for use in any medical products whose failure to perform may result in significant injury or death to the user. All products and materials are sold and services provided subject to the Company's conditions of sale, which are available on request.