



71MHz IF SAW Filter

Preliminary Information

DS4087 - 1.7 October 1995

The DW9276 is a 71MHz IF SAW filter which has been specifically designed for cellular radio architectures using the highly integrated 'Sceptre'™ hardware platform for GSM from AT&T Microelectronics.

Based on quartz for excellent temperature stability, the DW9276 provides very high channel selectivity, low Group Delay Ripple and Insertion Loss. Packaged in a Surface Mount, low profile leadless chip carrier, the DW9276 is ideally suited to high volume automatic assembly systems.

ABSOLUTE MAXIMUM RATINGS

DC Voltage VDC 0V Input Power Max. PIN 10dBm

NOMINAL IMPEDANCE

Input: 648 // 25pF Output: 1177 // 19pF

IMPUT | 5 | 6 | IMPUT RETURN GND CASE | 4 | 7 | GND CASE GND CASE | 2 | 9 | GND CASE OUTPUT RETURN | 10 | OUTPUT LCS10/1

50 TEST BOARD COMPONENTS

Input : Series Cap. 11pF, Shunt Ind. 150nH Output : Shunt Ind. 180nH, Series Cap. 10pF

Components: Coilcraft 1008CS Inductors: Murata 0805 Capacitors

ORDERING INFORMATION

For balanced order DW9276B For unbalanced order DW9276U

DW9276

ELECTRICAL CHARACTERISTICS @ 25°C

| Parameter | Min. | Тур. | Max. | Units |
|--|----------------------|----------------------|------|----------------------|
| Centre Frequency (fo) | - | 71.0 | - | MHz |
| 3dB Bandwidth | ±85 | ±160 | - | kHz |
| Insertion Loss | - | 6.0 | 7.0 | dB |
| Group Delay Ripple | - | 200 | 350 | ns |
| Amplitude Ripple* | - | 0.2 | 0.5 | dB |
| Stopband Rejection: fo ±400 - 600kHz fo ±600 - 1600kHz fo ±1600 - 3000kHz fo >±3000kHz | 22 28 38 50 | 25 30 40 53 | | dB dB dB dB |
| Operating Temperature Temperature Delta | -25 -8.5 | - | +80 | °C kHz |

^{*}Adjacent minima to maxima in 3dB bandwidth.

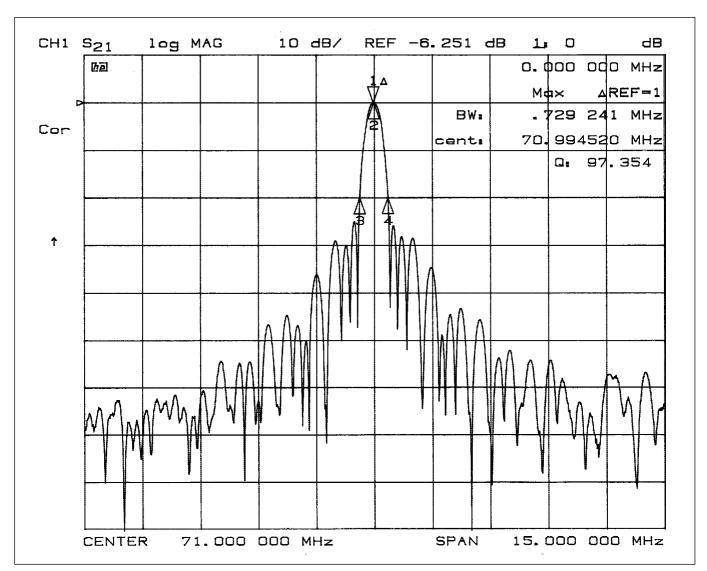


Figure 1: Amplitude Characteristics

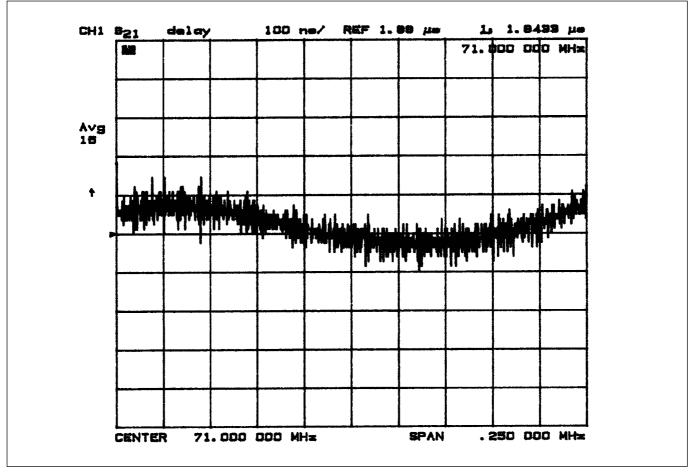
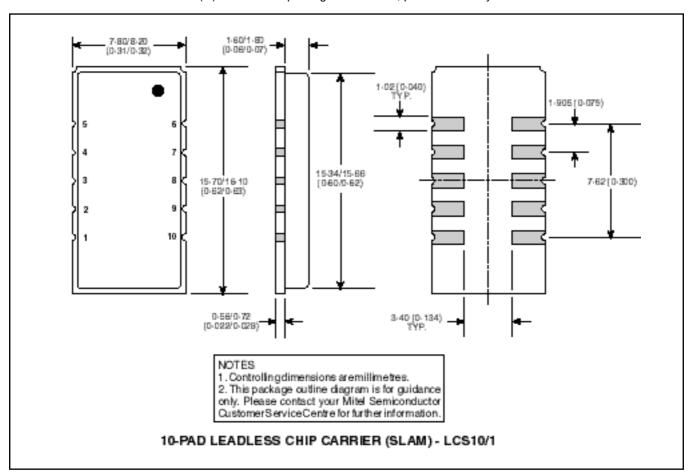


Figure 2: Group Delay Ripple Characteristics

DW9276

PACKAGE DETAILS

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





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