

DESCRIPTION

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:	648Ω // 25pF
Output:	1177Ω // 19pF

50Ω TEST BOARD COMPONENTS

Input: Shunt Cap 6.8pF, Series IND 220nH, Shunt Cap 80pF
 Output: Series Ind 300nH, Shunt Cap 80pF
 Components: Coilcraft 1008CS Inductors: Murata 0805 Capacitors

ODERING INFORMATION

For balanced order **DW9276B**
 For unbalanced order **DW9276U**

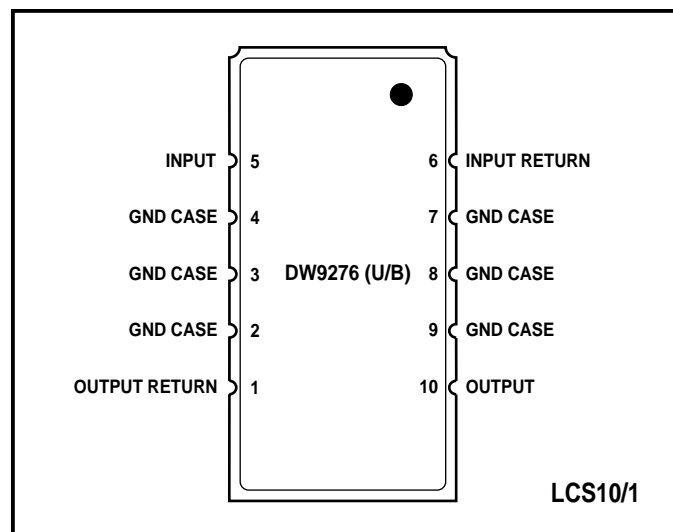


Figure 1: Pin connections

ELECTRICAL CHARACTERISTICS @ 25°C

Parameter	Min.	Typ.	Max.	Units
Centre Frequency (fo)	-	71.0	-	MHz
3dB Bandwidth	±85	±160	-	kHz
Insertion Loss	-	7.0	8.0	dB
Group Delay Ripple	-	250	400	ns
Amplitude Ripple*	-	0.2	0.5	dB
Stopband Rejection:				
fo ±400 - 600kHz	20	25	-	dB
fo ±600 - 1600kHz	24	26	-	dB
fo ±1600 - 3000kHz	30	40	-	dB
fo >±3000kHz	40	47	-	dB
Operating Temperature	-10	-	+55	°C
Temperature Delta	-8.5	-	-	kHz

*Adjacent minima to maxima in 3dB bandwidth.

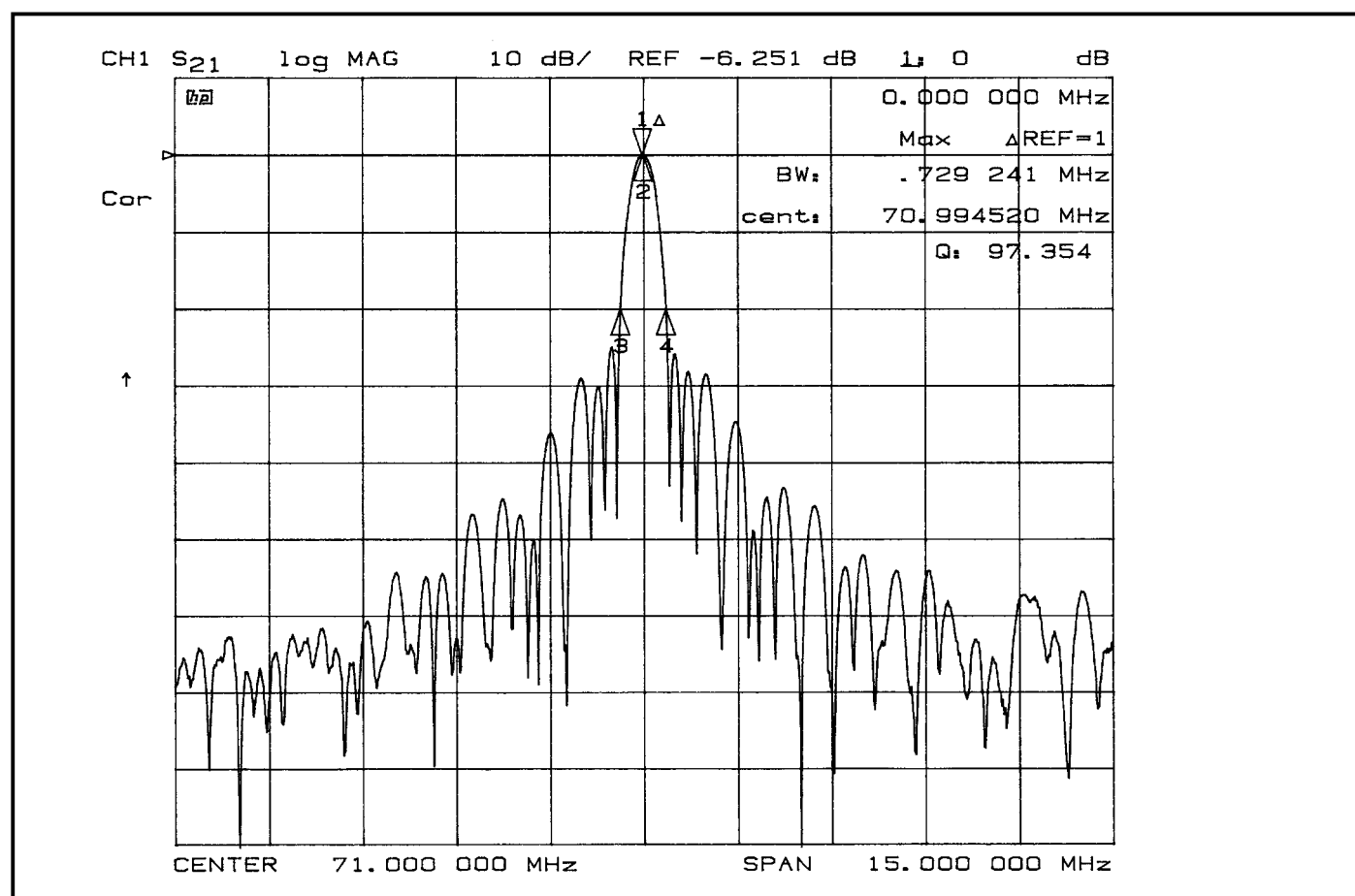


Figure 2: Amplitude Characteristics

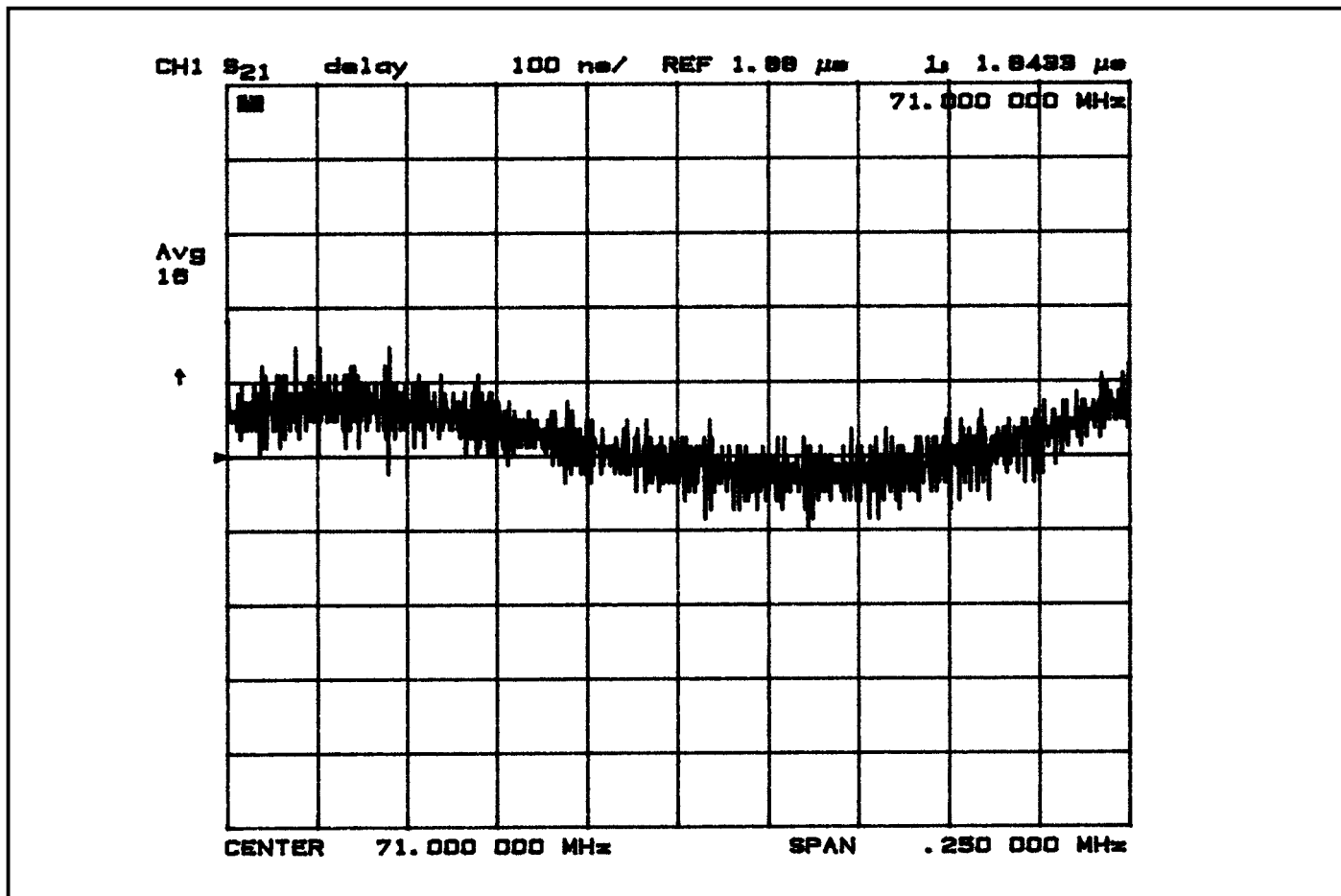
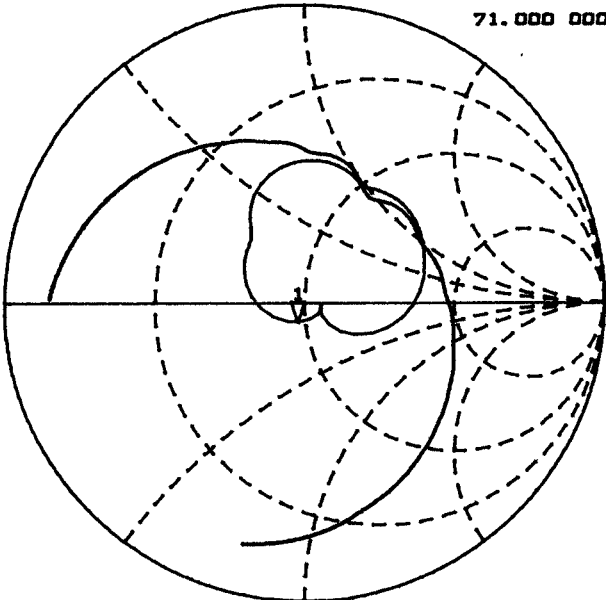


Figure 3: Group Delay Ripple Characteristics

CH1 S₁₁ 1 U FS L_s 47.783 Ω -8.1798 Ω 363.08 pF
71.000 000 MHz

Cor

†

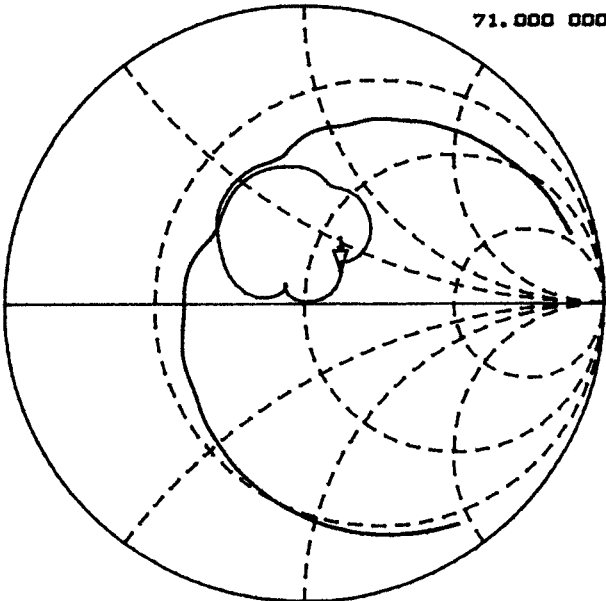


CENTER 71.000 000 MHz SPAN 15.000 000 MHz

CH1 S₂₂ 1 U FS L_s 62.901 Ω 14.107 Ω 31.825 nH
71.000 000 MHz

Cor

†

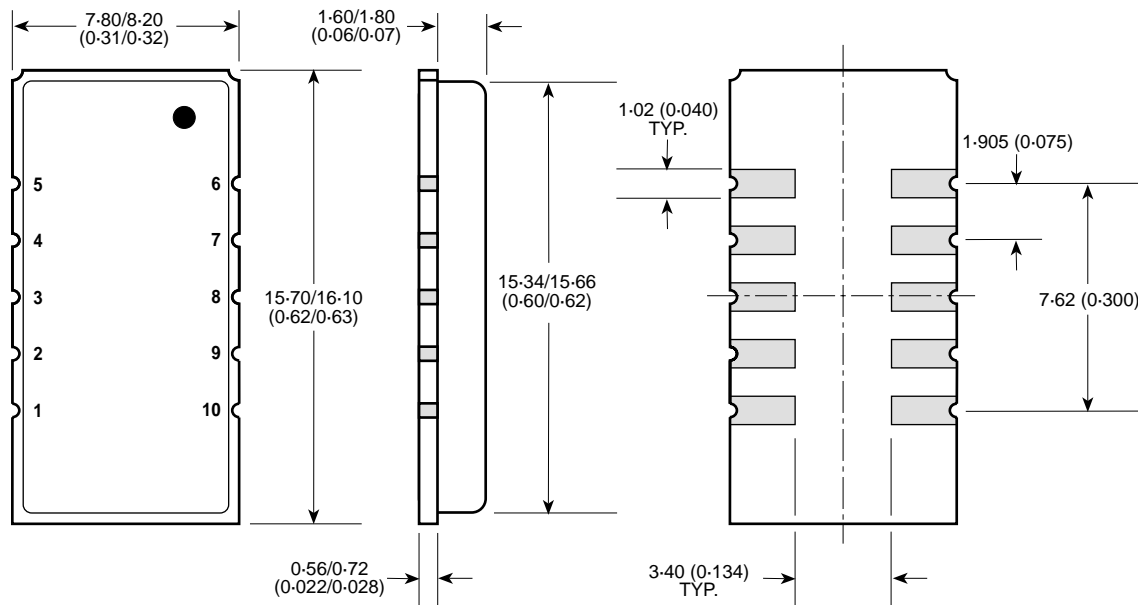


CENTER 71.000 000 MHz SPAN 15.000 000 MHz

Figure 4: Impedance Characteristics

PACKAGE DETAILS

Dimensions are shown thus: mm (in). DO NOT SCALE. For further package information, please contact Customer Services.



NOTES

1. Controlling dimensions are millimetres.
2. This package outline diagram is for guidance only. Please contact the Dynex Semiconductor Customer Service Centre for further information.

10-PAD LEADLESS CHIP CARRIER (SLAM) - LCS10/1



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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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