

**DESCRIPTION**

The DW9276 is a 71MHz IF SAW filter which has been specifically designed for cellular radio architectures using the highly integrated 'Sceptre'<sup>TM</sup> 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**

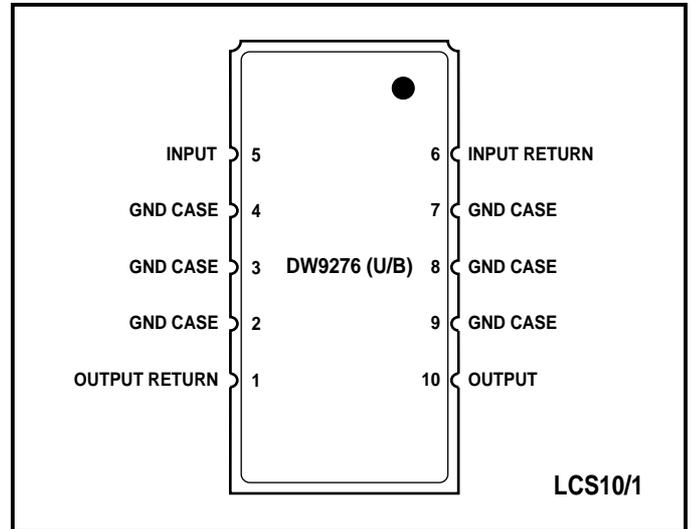


Figure 1: Pin connections

**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.

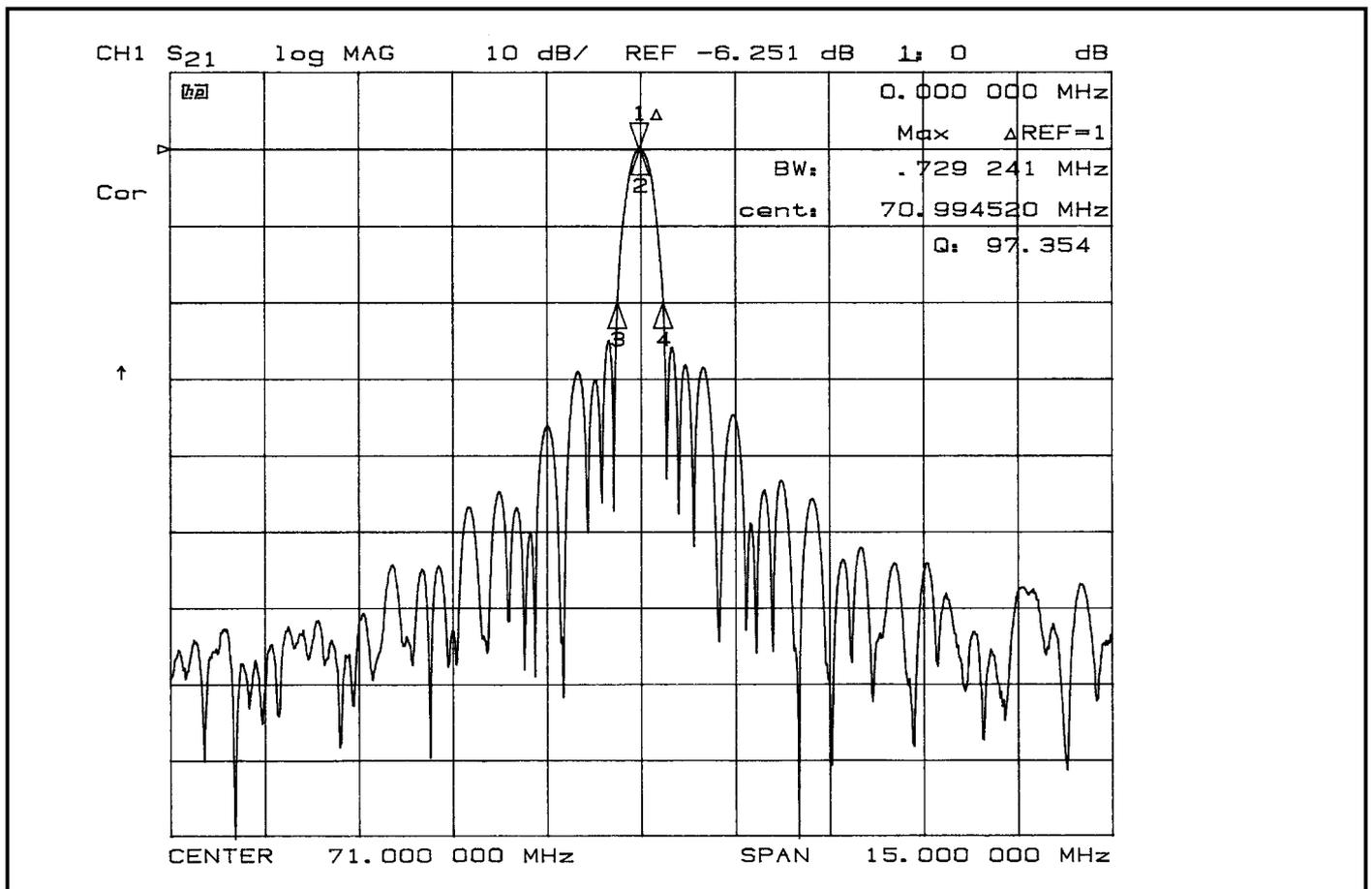


Figure 2: Amplitude Characteristics

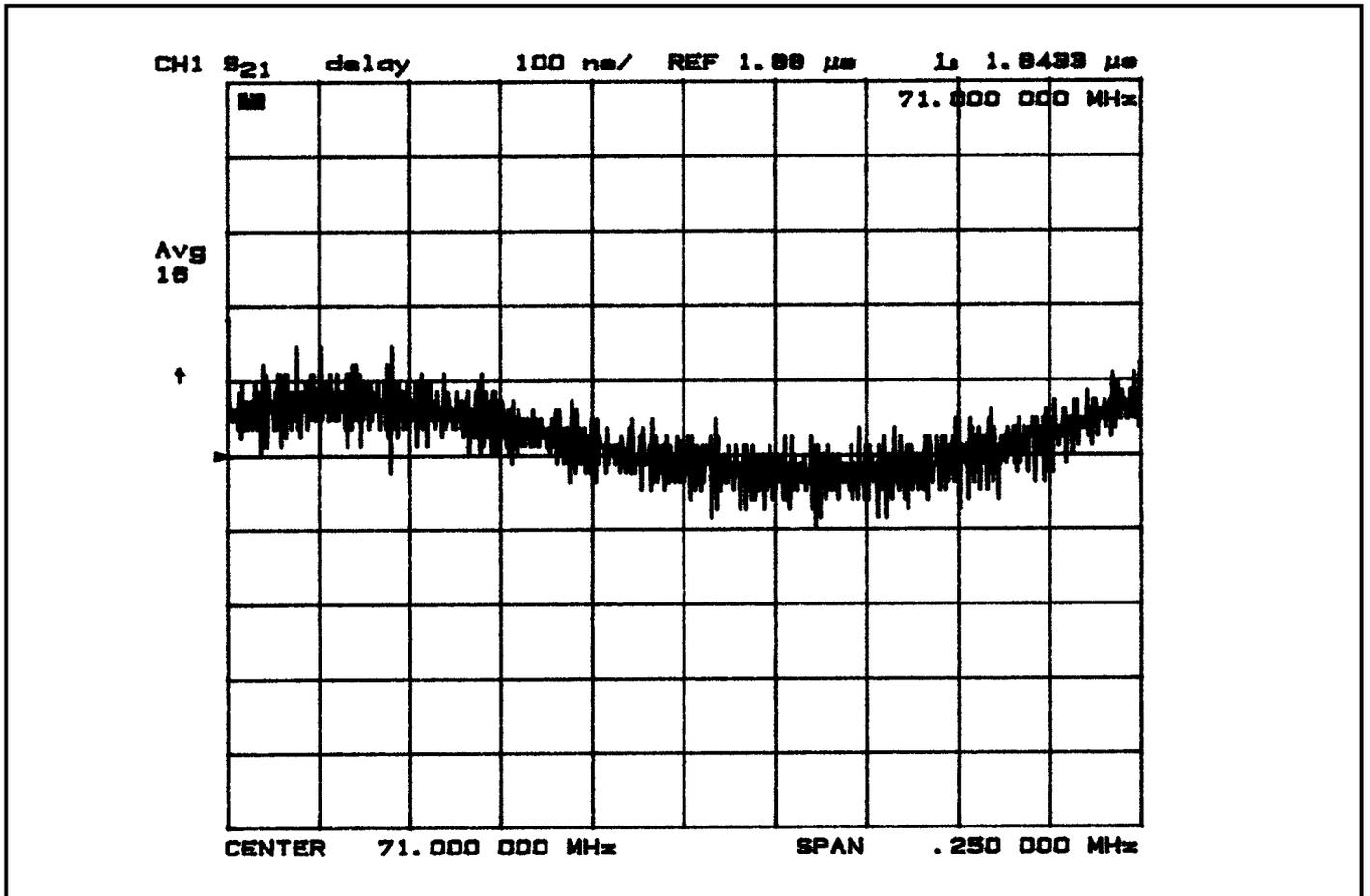


Figure 3: Group Delay Ripple Characteristics

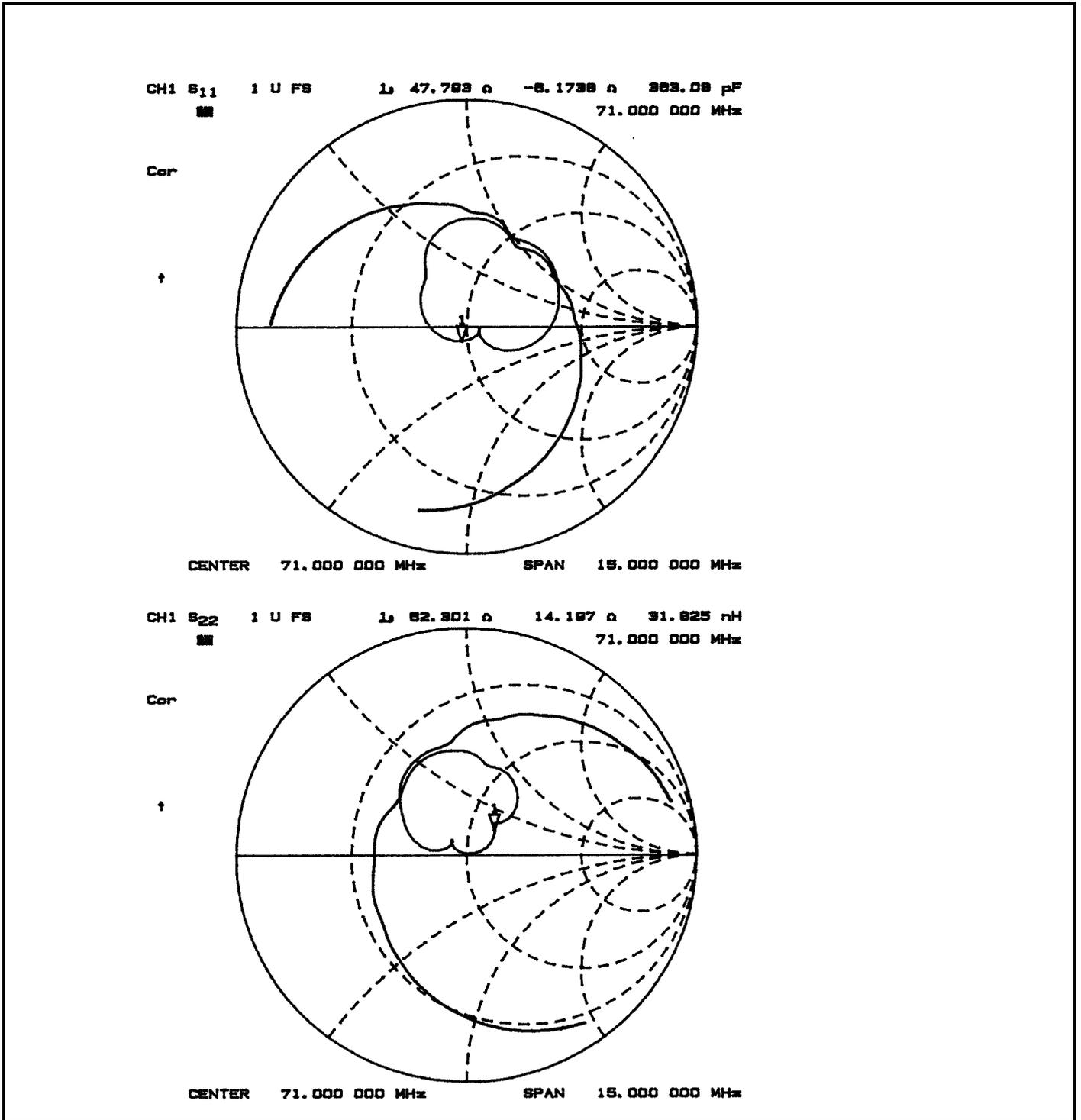
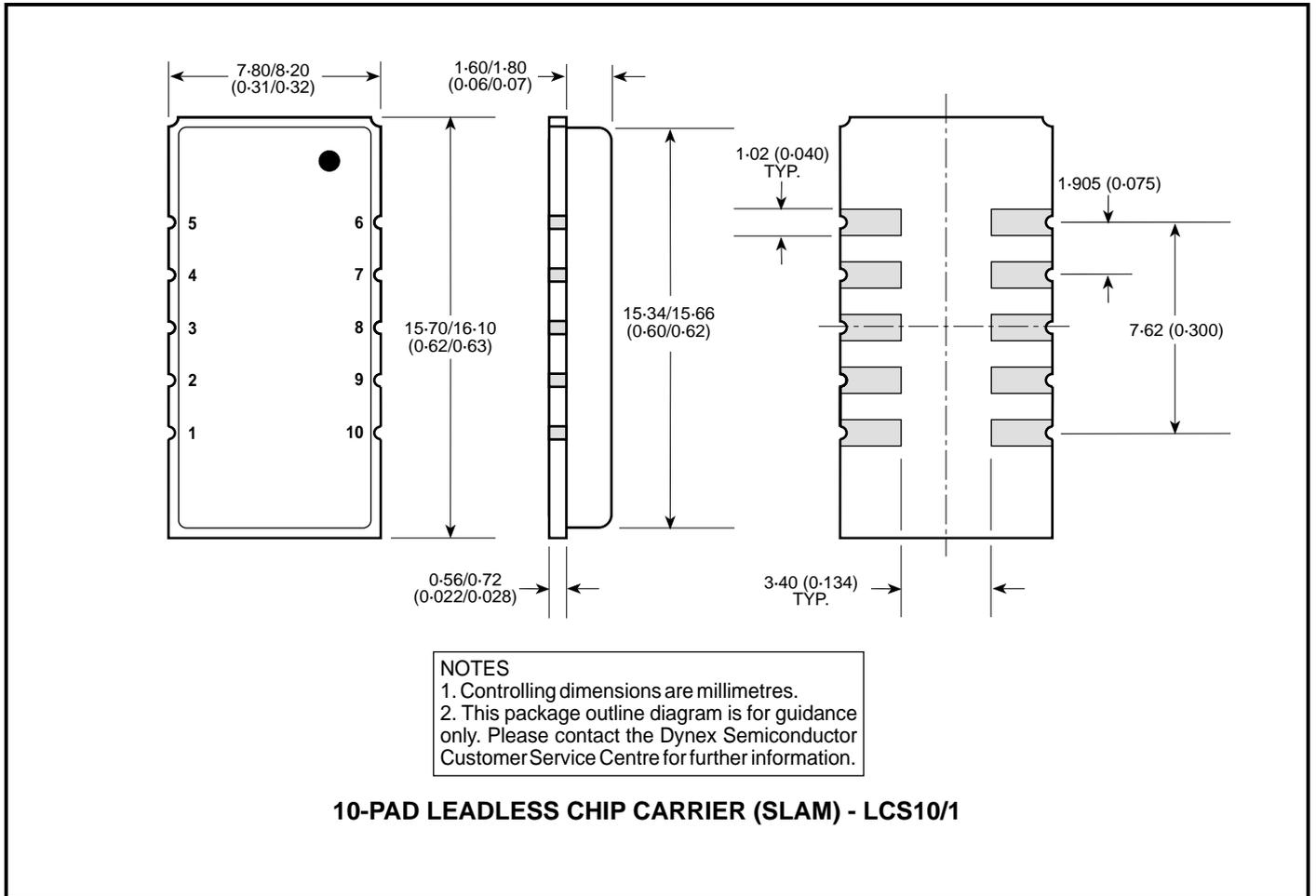


Figure 4: Impedance Characteristics

**PACKAGE DETAILS**

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





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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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