

# DW9265

# 196.99MHz IF SAW Filter

Replaces January 2000 version, DS4046-2.0

DS4046-2.1 July 2002

The DW9265 is a 196.99MHz IF SAW filter for Wireless Digital Personal Communications Systems. A transversal structure, based on quartz, has been utilised to provide a design with excellent temperature stability over -10° to +60°C. With a typical 3dB passband of 576kHz, and in excess of 50dB rejection at fc  $\pm 2.0 \text{MHz}$ , the filter provides good adjacent channel performance and low inter-symbol interference. The DW9265 also exhibits a low Group Delay Ripple (100ns typ.) and an inband Amplitude Ripple of 0.2dB, thus making it the ideal choice for Digital Communications, especially for the unlicensed PCS, low range voice and data services market.

### **FEATURES**

- 196.99MHz Centre Frequency (fc)
- Low Insertion Loss (9dB max.)
- 3db Passband 560kHz (min.)
- Quartz Temperature Stability
- Low Profile Ceramic LCC Package

# GND 3 12 GND GND 4 11 GND DW9265 GND 6 9 GND GND 7 8 LNBDLA TOMBUL 10 GND GND 6 9 GND LCS12/4

Fig. 1 Pin connections

## **ABSOLUTE MAXIMUM RATINGS**

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

### **NOMINAL IMPEDANCE:**

Input :  $500\Omega//16pF$ Output :  $625\Omega//14pF$ 

# $50\Omega$ TEST BOARD COMPONENTS

Input : Series Cap. 10pF, Shunt Ind. 27nH Output : Series Ind. 56nH, Shunt Cap. 33pF

Components : Coilcraft 1008CS Inductors : Murata 0805

Capacitors

### ORDERING INFORMATION

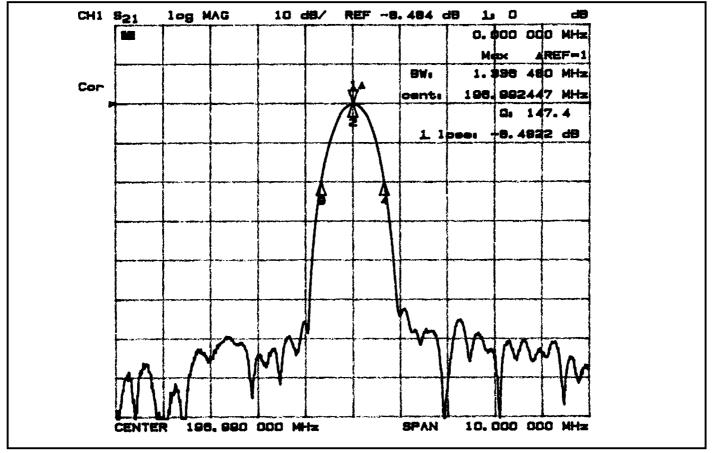
Orde as: DW9265



# **ELECTRICAL CHARACTERISTICS** @ 25°C

Parameter	Min.	Тур.	Max.	Units
Centre Frequency (fc)	196.96	196.99	197.02	MHz
3dB Bandwidth	560	576	592	kHz
Insertion Loss	-	8.0	9.0	dB
Group Delay Ripple	-	100	200	ns
Amplitude Ripple	-	0.2	1.0	dB
Stopband Rejection:				
fc ±0.750MHz	20	25	-	dB
fc ±1.550MHz	55	60	-	dB
fc ±3.1 - ±8MHz	55	60	-	dB
Over 1MHz bandwidths				
centred at		55	-	dB
fc - 10.0MHz	55	60	-	dB
fc - 20.0MHz	55	70	-	dB

Operating Temperature Range: -10 to +50°C

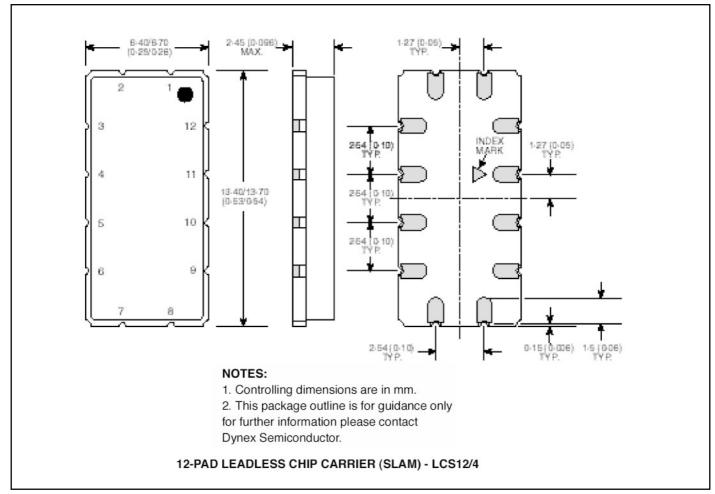


**Typical Response of DW9265** 



# **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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