

DS4069-1.3

# DW9265 196.99MHZ IF SAW FILTER FOR DIGITAL COMMUNICATIONS

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  $\pm 2.0$ 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 in-band 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

### **ABSOLUTE MAXIMUM RATINGS**



#### 50 GPS Test Board Components

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

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LCS12#

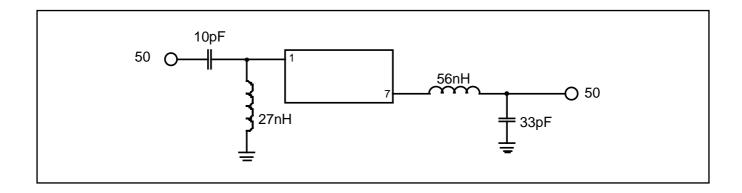
Components : Coilcraft 1008CS Inductors : Murata 0805 Capacitors

### **ORDERING INFORMATION**

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### Nominal Impedance:

Input : 500 //16pF Output : 625 //14pF

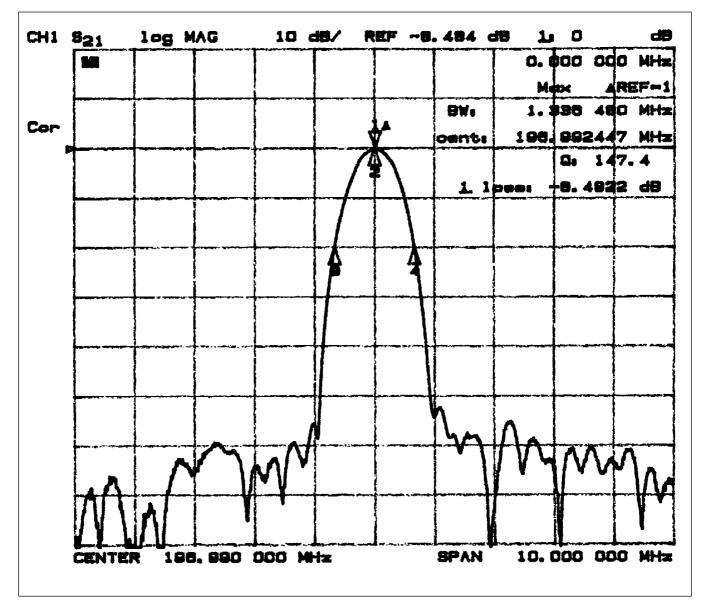


### DW9265

# **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

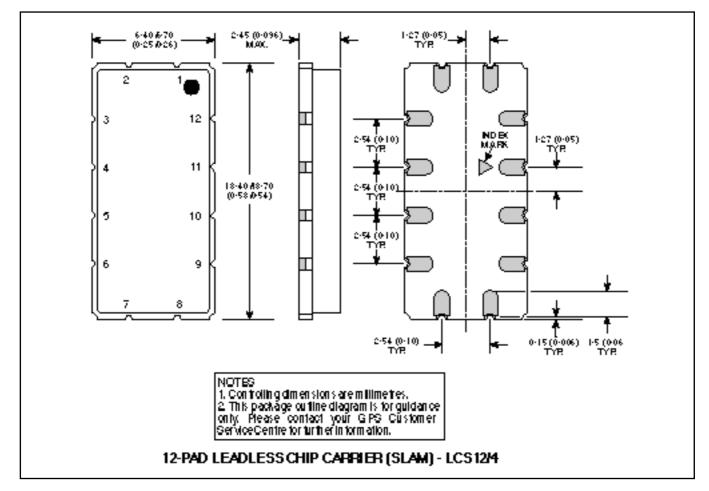


Typical Response of DW9265

### DW9265

### **PACKAGE DETAILS**

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



## 🚟 GEC PLESSEY SEMICONDUCTORS

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