MITEL

DW9265

196.99MHz IF SAW Filter

Advance Information

DS4046 - 1.4 October 1995

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 ±2.0MHz, 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

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

NOMINAL IMPEDANCE:

 $\begin{array}{ll} \text{Input} & : 500\Omega\text{//}16\text{pF} \\ \text{Output} & : 625\Omega\text{//}14\text{pF} \end{array}$

50Ω 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

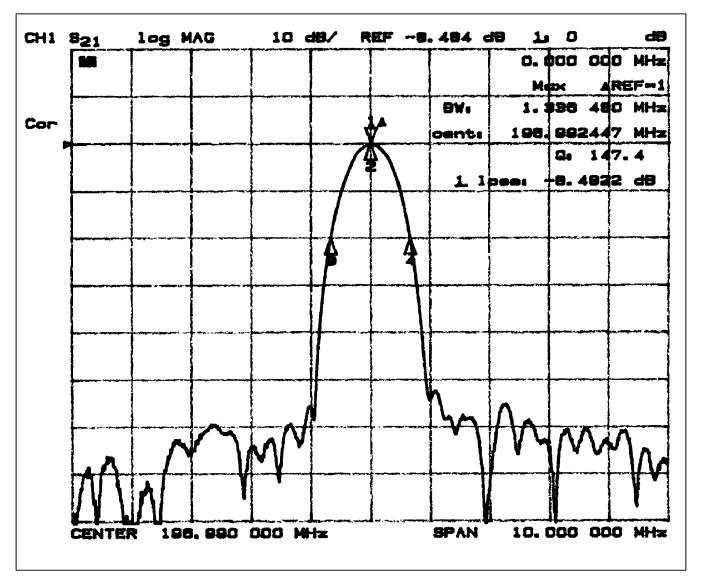
DW9265

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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

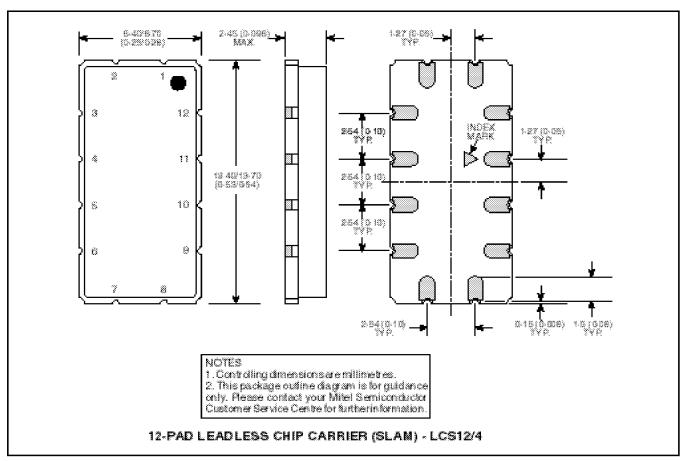


Typical Response of DW9265

DW9265

PACKAGE DETAILS

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





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